

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

IN RE TESLA, INC. SECURITIES
LITIGATION

Case No. [18-cv-04865-EMC](#)

**FINAL PRETRIAL CONFERENCE
ORDER**

I. BACKGROUND

The lead plaintiff and class representative in this case is Glen Littleton. Mr. Littleton is an investor who formerly traded for the Kansas City Board of Trade and the Chicago Mercantile Exchange. Mr. Littleton has traded Tesla, Inc. securities since 2015. Mr. Littleton represents a certified class (the “Class”) of all individuals and entities who purchased or sold Tesla stock, options, and other securities from 12:48 p.m. EST on August 7, 2018 to August 17, 2018 (the “Class Period”), and allegedly were damaged thereby.

The defendants in this case are Tesla, Inc., Elon Musk, Brad W. Buss, Robyn Denholm, Ira Ehrenpreis, Antonio J. Gracias, James Murdoch, Kimbal Musk, and Linda Johnson Rice (collectively, “Defendants”). Elon Musk (“Musk”) was Tesla’s Chief Executive Officer and Chairman of the Board of Directors during the Class Period. Brad W. Buss, Robyn Denholm, Ira Ehrenpreis, Antonio J. Gracias, James Murdoch, Kimbal Musk, and Linda Johnson Rice each served as a director of Tesla’s Board during the Class Period. Defendant Denholm replaced Mr. Musk as Tesla’s Chairman of the Board in November 2018.

Plaintiff intends to prove at trial that Mr. Musk and Tesla violated Sections 10(b) of the Securities Exchange Act of 1934 (15 U.S.C. §§ 78j, 78t) and SEC Rule 10b-5(b) (17 C.F.R. § 240.10b-5) promulgated thereunder. Specifically, on August 7, 2018, at 9:48 a.m. PST, Mr. Musk tweeted the following message to over 22 million followers: “Am considering taking Tesla private at \$420. Funding secured.” Musk made additional, subsequent tweets about the potential transaction including: “Investor support is confirmed. Only reason why this is not certain is that it’s contingent on a shareholder vote.” The Court will refer to these two tweets on August 7 as the Musk Tweets. On April 1, 2022, the Court issued an order granting in part Plaintiff’s motion for partial summary judgment regarding these statements, finding certain statements were false and that scienter—recklessness—had been established as a matter of law. *See* Docket No. 387 (Summary Judgment Order).

Further, Plaintiff alleges that these tweets were material and artificially affected the price of Tesla’s stock and other securities immediately after they were made. Defendants contend that Plaintiff has not and cannot prove that any of Mr. Musk’s statements were materially false, and that these statements regarding secured funding, as opposed to Mr. Musk’s statement that he planned to take Tesla private at \$420 per share, did not result in any artificial price inflation. The parties dispute the materiality and significance of an August 13, 2018 “update” contained in a blog post from Mr. Musk regarding the potential going private transaction.

Following the tweets on August 7, 2018, there was intense media and investor scrutiny of the proposed going-private transaction. After reaching a high of \$386.48 on August 7, 2018, Tesla’s stock price declined to \$335.45 by close on August 16, 2018. On August 17, 2018, *The New York Times* published an article based on a lengthy interview with Musk and others, which included a statement by the reporter that funding for a Tesla take-private “was far from secure.” Plaintiff alleges that *The New York Times* article corrected the false and/or materially misleading information previously disseminated by Defendants about the going-private transaction and, as a result, finally dissipated the artificial impact on the prices of Tesla stock and other securities. Defendants disagree and argue that the article did not disclose any new information regarding the potential go-private transaction but significantly reported on Mr. Musk’s health and exhaustion.

Plaintiff intends to prove that Defendants' false statements were materially misleading and damaged Plaintiff and the Class (*i.e.*, caused economic losses) and that losses were realized by the Class during the Class Period. Plaintiff further intends to prove that the members of Tesla's Board are liable under Section 20(a) of the Securities Exchange Act of 1934 (15 U.S.C. § 78t) as control persons for securities laws violations by Tesla.

Defendants deny liability and intend to prove at trial that Plaintiff's claims have no merit. Among other things, Defendants intend to prove that Plaintiff and the Class cannot prove the material falsity of the challenged statements or reliance thereon; cannot prove the challenged statements were material; cannot prove that Mr. Musk acted with the requisite scienter with respect to a materially false statement; cannot show damages or loss causation; and cannot show that there is control person liability.

II. TRIAL DATE & LENGTH OF TRIAL

Jury selection shall take place on January 17, 2023, beginning at 8:30 a.m. Counsel shall be present in the Courtroom at 8:00 a.m.

The jury trial shall begin on January 17, 2023, immediately following the conclusion of jury selection. Trial shall last from 8:30 a.m. to 1:30 p.m. on each day, except for Thursdays, which are dark. On all trial days counsel shall be present in the Courtroom at 8:00 a.m. to discuss any matters requiring resolution prior to commencement of trial at 8:30 a.m.

The trial shall last for approximately ten days: from January 17, 2023, to February 1, 2023. The ten allotted trial days will include jury selection. Each party will be given eighteen hours to present their case. This includes time examining witnesses (whether on direct or cross), and opening statements and closing arguments.

The Court will hold a second pretrial conference by Zoom on January 4, 2023, at 10:00 a.m.

III. ADVANCED NOTICE OF WITNESSES AND EXHIBITS

Each party shall provide 48 hours/two court days in advance for notice of witnesses and exhibits to be called each day. The Court reserves the authority to exclude witness for non-compliance.

All objections to witnesses and exhibits must be filed with the Court at least one court day (24 hours) before the witness is scheduled to testify. The Court will address objections before 8:30 a.m. on the following day. All objections should be provided in writing and filed with the Court, and a courtesy copy should be given to chambers immediately. The courtesy copy should be provided electronically to the Courtroom Deputy and should include a version of the objections in Microsoft Word as well as PDF.

Should a party fail to have enough witnesses to complete the trial day, the Court shall charge the surplus time remaining on that day against the party's total allotted time. For instance, if a party concludes a witness's examination with an hour remaining in the day and is not prepared to call another witness, then the Court will subtract that hour from the party's allotted eighteen hours.

IV. WITNESSES

A. Plaintiff

Mr. Littleton has identified the following individuals as witnesses that he may call in his case-in-chief.

- (1) Deepak Ahuja. Mr. Ahuja will testify regarding, among other things, his experience as Tesla's Chief Financial Officer, his reaction to the August 7, 2018 tweets, discussions with investors regarding the potential going private, his attendance at Tesla board meetings, and his involvement with the August 7, 2018 blog post.
- (2) Dave Arnold. Mr. Arnold will testify regarding, among other things, to his experience as Tesla's Senior Director of Global Communications, in particular, his conversations with various investors and news outlets following Mr. Musk's tweets on August 7, 2018, his familiarity with the topics of public reporting regarding the August 7 tweets, his involvement in the drafting of the August 7, 2018 letter to Tesla employees and the August 13 blog post, and his practice of escalating critical media inquiries and press coverage to Mr. Musk, the Tesla Board and senior management.

- (3) Ryan Brinkman (by deposition). Mr. Brinkman will testify regarding, among other things, his professional background and experience as an analyst at JPMorgan, the market's response to Defendants' statements on August 7 and 13, 2018, and considerations behind his decision to initially increase, and later reduce, JPMorgan's price target for Tesla stock.
- (4) Brad Buss. Mr. Buss will testify regarding, among other things, his experience as a member of Tesla's Board of Directors, the Board's consideration and discussion of Mr. Musk's proposal to take Tesla private, Mr. Musk's use of Twitter as a means of Tesla marketing, and Tesla's implementation of a disclosure policy relating to Mr. Musk's Twitter usage. Mr. Buss is a defendant in this case.
- (5) Aaron Chew. Mr. Chew will testify regarding, among other things, his experience as Tesla's Senior Director of Investor Relations in the summer of 2018, investor feedback on Musk's use of Twitter generally and in particular in August of 2018, his interactions with NASDAQ on August 7, 2018, his correspondence with Tesla investors regarding the August 7, 2018 tweets, and feedback regarding the proposed going private.
- (6) Dan Dees (by deposition). Mr. Dees will testify regarding, among other things, his professional background and experience at Goldman Sachs Group Inc. (GS) and, in particular, his interactions with Mr. Musk, the Tesla Board, Silver Lake Partners, and others concerning the proposed take-private transaction, GS's role and engagement as financial advisor, and GS's outreach to potential sources of funding after Mr. Musk's August 7, 2018 tweets.
- (7) Robyn Denholm. Ms. Denholm will testify regarding, among other things, her experience as a member of Tesla's Board of Directors, the Board's consideration and discussion of Mr. Musk's proposal to take Tesla private, her role and experience as a member of Tesla's audit committee and the Special Committee formed to evaluate Mr. Musk's proposal to take Tesla private, her

knowledge of Mr. Musk's use of Twitter, the Board's knowledge of Mr. Musk's use of Twitter, and Tesla's implementation of a disclosure policy relating to Mr. Musk's Twitter usage. Ms. Denholm is a defendant in this case.

(8) Egon Durban. Mr. Durban will testify regarding, among other things, his professional background and experience as one of Silver Lake Partner's managing partners, his interactions with Mr. Musk and others concerning the proposal to take Tesla private at \$420 per share, the work that Silver Lake performed in connection with the going private, and Silver Lake's presentation to the Tesla board on August 23.

(9) Joseph Fath (by deposition). Mr. Fath will testify regarding, among other things, his professional background and experience as a portfolio manager at T. Rowe Price, his and T. Rowe Price's response to Defendants' statements on August 7 and 13, 2018, T. Rowe Price's ability to invest in Tesla if the proposed going-private transaction were to have occurred, and his meeting with Mr. Musk to discuss concerns about Mr. Musk's Twitter use.

(10) Timothy Fries. Mr. Fries will testify regarding, among other things, his reasons for investing in Tesla, his response to Defendants' statements on August 7 and 13, 2018, and the losses he suffered in Tesla securities due to Mr. Musk and Tesla's false statements.

(11) Antonio Gracias. Mr. Gracias will testify regarding, among other things, his Valor fund's investment in Tesla and Valor's involvement with Tesla, the nature of his relationship with Mr. Musk, his role and experience as a member of Tesla's audit committee, his knowledge of Musk's use of Twitter, the Board's knowledge of Musk's use of Twitter and the economic benefits to Tesla derived from it, and the Board's consideration and discussion of Mr. Musk's proposal to take Tesla private. Mr. Gracias is a defendant.

(12) Michael Hartzmark (expert). Dr. Hartzmark will testify regarding the opinions set forth in his expert reports dated September 22, 2020 and November 10,

2021, including the price and trading of Tesla's securities during the Class Period and the amount of inflation/deflation and damages allegedly caused by Defendants' statements on August 7 and 13, 2018.

(13) Steven Heston (expert). Professor Steven Heston will testify regarding the opinions set forth in his expert report dated November 8, 2021, including, various pricing models and principles concerning option securities, the changes in the prices and implied volatilities of Tesla options during and around the Class Period, and methods for measuring the impact on Tesla option prices as a result of the alleged misstatements.

(14) Nii Owuraka Koney (by deposition). Mr. Koney will testify regarding, among other things, his professional background and experience as an analyst at Jennison, Mr. Musk's prior interest in taking Tesla private, the market's response to Defendants' statements on August 7 and 13, 2018, and his communications with Tesla's investor relations regarding the potential going private.

(15) Plaintiff Glen Littleton. Mr. Littleton will testify regarding, among other things, his personal and professional background, including his reasons for investing in Tesla, his response to Defendants' statements on August 7 and 13, 2018, and the losses he suffered in Tesla securities due to Musk and Tesla's false statements.

(16) Joshua Mitts (expert). Professor Mitts will testify regarding the opinions set forth in his expert report dated November 8, 2021, including the market conditions for Tesla stock at and around August 2018, the short interest in Tesla common stock, and Musk's conduct and public statements with regard to short investors in Tesla.

(17) Elon Musk. Mr. Elon Musk will testify regarding, among other things, his desire to take Tesla private, with whom he had discussed taking Tesla private prior to August 7, 2018, all events preceding and occurring after his tweets on

1 August 7, 2018 concerning his proposal to take Tesla private at \$420 per share,
 2 including his conversations with the Saudi PIF and Tesla's Board of Directors,
 3 his outreach to Tesla institutional investors after the August 7, 2018 tweets, his
 4 usage of Twitter both before and after the August 7, 2018 tweets, the August
 5 13, 2018 blog post, and practices concerning public announcements of past
 6 deals.

7 (18) Kimbal Musk. Mr. Kimbal Musk will testify regarding, among other things, his
 8 relationship with his brother Elon, his knowledge of his brother's desire to take
 9 Tesla private, his experience as a member of Tesla's Board of Directors, the
 10 Board's consideration and discussion of Mr. Musk's proposal to take Tesla
 11 private, and his communications about Musk's tweets on August 7, 2018.

12 (19) Rick Polhemus (by deposition). Mr. Polhemus will testify regarding, among
 13 other things, his professional background and experience at Morgan Stanley
 14 and, in particular, his work in investment banking, capital raises for Tesla
 15 including Tesla's IPO, periodic discussions with Tesla's CFO regarding the
 16 company's capital needs, his response as well as Morgan Stanley's response to
 17 the potential going private transaction, and Morgan Stanley's involvement with
 18 the going private transaction.

19 (20) Guhan Subramanian (expert). Professor Subramanian will testify regarding the
 20 opinions set forth in his expert report dated November 8, 2021, including
 21 customary practices and procedures in management buyouts as well as his
 22 experience with the Dell Inc. buyout, that Mr. Musk's conduct with respect to
 23 the proposed going private transaction allegedly deviated from ordinary
 24 practices in the industry, and that the proposal to take Tesla private was *inter*
 25 *alia* illusory.

26 (21) Martin Viecha. Mr. Viecha will testify regarding, among other things, his
 27 experience as Tesla's Director of Investor Relations and his conversations with
 28 various analysts and investors following Musk's tweets on August 7, 2018.

1 B. Defendants

2 Defendants have identified the following individuals as witnesses that they may call in
3 their case-in-chief or cross-examine.

4 (1) Elon Musk. Mr. Musk, who is also listed on Plaintiff's witness list, will testify
5 regarding, among other things, the statements at issue in this case and
6 background related thereto; facts related to the materiality of the statements
7 challenged by Plaintiff, and to whether those statements altered the total mix of
8 information available, including relative to the events that took place between
9 July 31, 2018 and August 17, 2018; the potential go-private transaction and
10 communications related thereto; facts related to the capacity in which Mr. Musk
11 acted when he made communications, including the statements challenged by
12 Plaintiff; facts related to the board's good faith; and facts related to whether the
13 board directly or indirectly controlled Mr. Musk's Twitter account.

14 (2) Sam Teller. Mr. Teller is Tesla's former Director of the Office of the CEO.
15 Defendants expect that Mr. Teller will testify regarding the statements at issue
16 in this case and background related thereto; facts related to the materiality of
17 the statements challenged by Plaintiff, and to whether those statements altered
18 the total mix of information available, including relative to the events that took
19 place between July 31, 2018 and August 17, 2018; and the potential go-private
20 transaction and communications related thereto.

21 (3) Deepak Ahuja. Mr. Ahuja also appears on Plaintiff's witness list. Mr. Ahuja is
22 Tesla's former Chief Financial Officer. Defendants expect that Mr. Ahuja will
23 testify regarding, among other things, the statements at issue in this case and
24 background related thereto; facts related to the materiality of the statements
25 challenged by Plaintiff, and to whether those statements altered the total mix of
26 information available, including relative to the events that took place between
27 July 31, 2018 and August 17, 2018; and the potential go-private transaction and
28 communications related thereto.

- (4) Robyn Denholm. Ms. Denholm is also on Plaintiff's witness list. She is a member of Tesla's Board of Directors. Ms. Denholm will testify regarding, among other things, her experience as a member of Tesla's Board of Directors, Mr. Musk's communications with the board regarding the potential go-private transaction, board meetings and communications regarding the potential go-private transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.
- (5) Ira Ehrenpreis. Mr. Ehrenpreis is a member of Tesla's Board of Directors. Mr. Ehrenpreis will testify regarding, among other things, his experience as a member of Tesla's Board of Directors, Mr. Musk's communications with the board regarding the potential go-private transaction, board meetings and communications regarding the potential go-private transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.
- (6) James Murdoch. Mr. Murdoch is a member of Tesla's Board of Directors. Mr. Murdoch will testify regarding, among other things, his experience as a member of Tesla's Board of Directors, Mr. Musk's communications with the board regarding the potential go-private transaction, board meetings and communications regarding the potential go-private transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.
- (7) Kimball Musk. Mr. Musk is also listed on Plaintiff's witness list. Mr. Musk will testify regarding, among other things, the statements at issue in this case and background related thereto; facts related to the materiality of the statements challenged by Plaintiff, and to whether those statements altered the total mix of

1 information available, including relative to the events that took place between
2 July 31, 2018 and August 17, 2018; the potential go-private transaction and
3 communications related thereto; facts related to the capacity in which Mr. Musk
4 acted when he made communications, including the statements challenged by
5 Plaintiff; facts related to the Board of Directors' good faith; and facts related to
6 whether the Board of Directors directly or indirectly controlled Mr. Musk's
7 Twitter account.

8 (8) Antonio Gracias. Mr. Gracias is a former member of Tesla's Board of
9 Directors. Mr. Gracias will testify regarding, among other things, his
10 experience as a member of Tesla's Board of Directors, Mr. Musk's
11 communications with the board regarding the potential go-private transaction,
12 board meetings and communications regarding the potential go-private
13 transaction, facts related to whether the Board of Directors directly or
14 indirectly controlled Mr. Musk's Twitter account, and facts related to whether
15 the Board of Directors acted in good faith.

16 (9) Brad Buss. Mr. Buss is also on Plaintiff's witness list. Mr. Buss is a former
17 member of Tesla's Board of Directors. Mr. Buss will testify regarding, among
18 other things, his experience as a member of Tesla's Board of Directors, Mr.
19 Musk's communications with the board regarding the potential go-private
20 transaction, board meetings and communications regarding the potential go-
21 private transaction, facts related to whether the Board of Directors directly or
22 indirectly controlled Mr. Musk's Twitter account, and facts related to whether
23 the Board of Directors acted in good faith.

24 (10) Linda Johnson Rice. Ms. Johnson Rice is a former member of Tesla's Board of
25 Directors. Ms. Johnson Rice will testify regarding, among other things, her
26 experience as a member of Tesla's Board of Directors, Mr. Musk's
27 communications with the board regarding the potential go-private transaction,
28 board meetings and communications regarding the potential go-private

transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.

(11) Larry Ellison. Mr. Ellison is a former member of Tesla's Board of Directors. Defendants expect that Mr. Ellison will testify regarding the potential go-private transaction and communications related thereto.

(12) JB Straubel. Mr. Straubel is a Tesla co-founder and its former Chief Technology Officer. Defendants expect that Mr. Straubel will testify regarding, among other things, the potential go-private transaction and communications related thereto.

(13) Egon Durban. Mr. Durban is also listed on Plaintiff's witness list. He is a Managing Partner at Silver Lake Partners. Defendants expect that Mr. Durban will testify regarding, among other things, the potential go-private transaction and communications related thereto.

(14) Dan Dees. Mr. Dees is also listed on Plaintiff's witness list (by deposition). He is Co-Head of Global Investment Banking at Goldman Sachs. Defendants expect that Mr. Dees will testify regarding, among other things, the potential go-private transaction and communications related thereto.

(15) Rick Polhemus. Mr. Polhemus is also listed on Plaintiff's witness list (by deposition). He is a Managing Director at Morgan Stanley. Defendants expect that Mr. Polhemus will testify regarding, among other things, the potential go-private transaction and other transactions and communications related thereto.

(16) Daniel Fischel (expert). Defendants expect Mr. Fischel will testify, among other things, that Mr. Musk's actions in August 2018 were consistent with his prior-stated interest in taking Tesla private and in protecting investors who believed in his vision, it was reasonable to believe that the proposed go-private transaction would have been funded if it moved forward, the \$420 potential offer price was reasonable, and neither Mr. Musk nor the other Defendants

benefited from the fraud that Plaintiff alleges. Mr. Fischel will also critique the opinions of Dr. Hartzmark, Professor Mitts, and Professor Subramanian.

(17) Amit Seru (expert). Professor Seru has been identified as one of Defendants' expert witnesses, and his opinions are disclosed in his expert reports.

Defendants expect Professor Seru will testify, among other things, that Professor Heston's methodology for estimating damages to Tesla option holders is fundamentally flawed in the context of a merger or acquisition deal, and that Professor Heston's other opinions are speculative, unsupported by academic literature, and fail to use actual prices to measure damages.

Defendants expect Professor Seru will testify, among other things, that Dr. Hartzmark's implementation of Professor Heston's methodology is similarly speculative, unreliable, and inaccurate.

(18) Yasir Al-Rumayyan. Mr. Al-Rumayyan is the Governor of the PIF, the sovereign wealth fund of the Kingdom of Saudi Arabia. Defendants expect that Mr. Al-Rumayyan will testify regarding the potential go-private transaction and communications related thereto.

(19) Saad Al Jarboa. Mr. Al Jarboa is employed by the PIF. Defendants expect that Mr. Al Jarboa will testify regarding the potential go-private transaction and communications related thereto.

(20) Naif Al Mogren. Mr. Al Mogren is employed by the PIF. Defendants expect that Mr. Al Mogren will testify regarding the potential go-private transaction and communications related thereto.

(21) Turki Alnowaiser. Mr. Alnowaiser is employed by the PIF. Defendants expect that Mr. Alnowaiser will testify regarding the potential go-private transaction and communications related thereto.

(22) Glen Littleton. Mr. Littleton is the Class Plaintiff. Defendants plan to cross-examine Mr. Littleton.

- (23) Guhan Subramanian. Professor Subramanian has been identified as one of Plaintiff's expert witnesses. Defendants plan to cross-examine Professor Subramanian.
- (24) Joshua Mitts. Professor Mitts has been identified as one of Plaintiff's expert witnesses. Defendants plan to cross-examine Professor Mitts.
- (25) Steven Heston. Dr. Heston has been identified as one of Plaintiff's expert witnesses. Defendants plan to cross-examine Dr. Heston.
- (26) Michael Hartzmark. Dr. Hartzmark has been identified as one of Plaintiff's expert witnesses. Defendants plan to cross-examine Dr. Hartzmark.
- (27) Timothy Fries. Mr. Fries is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Fries.
- (28) Dave Arnold. Mr. Arnold is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Arnold.
- (29) Martin Viecha. Mr. Viecha is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Viecha.
- (30) Aaron Chew (by deposition). Mr. Chew is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Chew.
- (31) Ryan Brickman (by deposition). Mr. Brinkman is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Brinkman.
- (32) Joshua Fath (by deposition). Mr. Fath is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Fath.
- (33) Nii Owuraka Koney (by deposition). Mr. Koney is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Koney.

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V. **THE AUGUST 13, 2018 BLOG POST**

In addition to the Musk Tweets, Plaintiff alleges that the August 13, 2018 blog post contains fraudulent statements in violation of federal securities laws. In particular, Plaintiff alleges that the portion of the blog post featured below is misleading because it omits information regarding interactions that Mr. Musk had with the Saudi PIF in the days following August 7, 2018.

Why did I say “funding secured”?

Going back almost two years, the Saudi Arabian sovereign wealth fund has approached me multiple times about taking Tesla private. They first met with me at the beginning of 2017 to express this interest because of the important need to diversify away from oil. They then held several additional meetings with me over the next year to reiterate this interest and to try to move forward with a going private transaction. Obviously, the Saudi sovereign fund has more than enough capital needed to execute on such a transaction.

Recently, after the Saudi fund bought almost 5% of Tesla stock through the public markets, they reached out to ask for another meeting. That meeting took place on July 31st. During the meeting, the Managing Director of the fund expressed regret that I had not moved forward previously on a going private transaction with them, and he strongly expressed his support for funding a going private transaction for Tesla at this time. I understood from him that no other decision makers were needed and that they were eager to proceed.

I left the July 31st meeting with no question that a deal with the Saudi sovereign fund could be closed, and that it was just a matter of getting the process moving. This is why I referred to “funding secured” in the August 7th announcement.

Under this omission theory of liability, Plaintiff contends that Mr. Musk’s characterization of the likelihood of the privatization transaction occurring as of August 7 is at odds with the actual state of affairs given his text exchange with Yassir al-Rumayyan of the Saudi PIF on August 12 telling him that the Saudi PIF’s opportunity to invest was “over.” Ex. 121.¹ By omitting information regarding the apparent deterioration of his relationship with the Saudi PIF, Mr. Musk misled investors and the market into believing that the privatization transaction was still on the table.

Defendants object that this theory is both procedurally and substantively untenable. *See* Docket No. 504. Because the Court finds that Plaintiff failed to plead or timely disclose this theory of liability, the Court concludes that this theory is precluded from trial and does not

¹ Unless otherwise noted, the cited exhibits may be found at Docket Nos. 453 and 485.

1 consider Defendants’ arguments on the merit.

2 Under the Private Securities Litigation Reform Act (“PSLRA”) and the Court’s Standing
3 Order, Plaintiff was required to disclose all allegedly misleading statements and omissions along
4 with “the reason or reasons why the statement is misleading” at the pleadings stage. *See* 15 U.S.C.
5 § 78u—4(b)(1)(B); Civil Standing Order R. 10. Plaintiff did not do so. Plaintiff cited the August
6 13 blog post in his complaint and included portions of the blog post in the addendum, but he did
7 not allege that the blog post was misleading because of the near-breakdown of communications
8 between Mr. Musk and the PIF.

9 During the pretrial conference, Plaintiff acknowledged that this theory was not specifically
10 alleged in the pleadings, but claimed that he had sufficiently disclosed this theory of liability to
11 Defendants during discovery and pretrial proceedings and, in particular, within his responses to
12 Defendants’ contention interrogatories. After reviewing the relevant portions of the interrogatory
13 responses, the Court disagrees. While the interrogatory responses assert that “the August 13 blog
14 post” was misleading because of, *inter alia*, the breakdown between Mr. Musk and the Saudi PIF,
15 Plaintiff did not allege that the specific statements from the blog post quoted above were
16 actionable under that theory. *See* Docket No. 503-1 (Plaintiff’s Interrogatory Responses) at 6, 8–
17 9. Instead, the interrogatory response broadly contended that “the August 13 blog post left
18 investors with a misleading impression of the nature and status of Musk’s proposal to take Tesla
19 private at \$420 per share as well as misrepresented the status of Musk and Tesla’s discussions
20 with the Saudi Arabia Public Investment Fund and other existing and potential investors.” *Id.* at 8
21 (capitalization altered for clarity). It was inadequate for Plaintiff to generally allege that the entire
22 blog post—which is fourteen paragraphs long and spans three pages of the Consolidated
23 Complaint—supported this theory of liability. *See* Docket No. 184 at 24–26. The failure to
24 articulate particular statements within the blog post which supported Plaintiff’s theory runs
25 counter to the heightened pleading requirements of the PSLRA and the Court’s Standing Order
26 which require that the plaintiff’s complaint “specify each statement alleged to have been
27 misleading” and “the reason or reasons why the statement is misleading,” among other things. *See*
28 15 U.S.C. § 78u—4(b)(1)(B); Civil Standing Order R. 10 (requiring chart that identifies any

allegedly fraudulent statement or omission and the reason why the statement was false or misleading). Notably, in July, Plaintiff argued that this *same* interrogatory response purportedly put Defendants on notice of this particular omissions theory with respect to a *different* statement in the blog post. *See* Docket No. 452-1 at 3–5 (arguing that blog post statement “I have continued to communicate with the Managing Director of the Saudi fund . . .” was misleading in part because Mr. Musk omitted facts regarding the alleged deterioration of his relationship with the Saudi PIF). Further, without linking the particular statement asserted here—“I left the July 31 meeting with no question that a deal with the Saudi fund could be closed . . .”—to this particular theory of liability, Plaintiff did not sufficiently disclose this theory to Defendants. To find otherwise would be an end-run around the PSLRA. *Cf.* 15 U.S.C. § 78u—4(b)(1)(B) (requiring that “the complaint shall specify each statement alleged to have been misleading [and] the reason or reasons why the statement is misleading”); *see also In re Twitter, Inc. Sec. Litig.*, No. 16-cv-05314-JST, 2020 WL 4188787, at *4 (N.D. Cal. May 19, 2020) (precluding plaintiff from asserting statements as a basis for liability at trial where plaintiffs failed to allege statements in complaint). Such vague and imprecise pleading cannot be squared with the heightened pleading requirements of the PSLRA.

In sum: because Plaintiff did not timely plead or disclose this theory of liability, he is precluded from arguing that these statements from the August 13 blog post are independently actionable under an omissions theory of liability.

VI. MOTIONS IN LIMINE

A. Mr. Littleton’s Motions in Limine

1. Motion in Limine No. 2 (Docket No. 480)

Plaintiff moves to preclude Defendants from introducing any undisclosed testimony, opinion, or evidence from Professor Fischel or Professor Seru.² Professor Fischel is Defendants’ loss causation expert, while Professor Seru rebuts Professor Heston’s methodology for estimating damages to option holders and Professor Hartzmark’s calculation of damages for Tesla option

² Because Plaintiff does not identify any previously undisclosed testimony, opinion, or evidence for Professor Seru, the Court cannot determine whether any particular opinion was disclosed. Thus, the Court denies without prejudice Plaintiff’s motion as to Professor Seru.

holders. *See* Ex. 423 (Fischel Rebuttal Report) ¶ 5; Ex. 370 (Expert Rebuttal Report of Amit Seru) ¶ 7. Plaintiff argues that Professor Fischel’s expert reports did not disclose evidence concerning: (1) “the immateriality of the alleged misstatements and omissions;” and (2) “opinions on Tesla common stock.” Mot. at 6. Because information not disclosed in expert reports is inadmissible at trial “unless the failure was substantially justified or is harmless,” *see* Fed. R. Civ. P. 26(a)(2), 37(c)(1), Plaintiff contends that Professor Fischel is barred from offering such evidence or testimony at trial.

As set forth below, the Court **GRANTS IN PART AND DENIES IN PART** this motion. The motion is **DENIED** with respect to materiality because Professor Fischel implicitly discussed materiality in his report. But because Professor Fischel did not opine on Tesla’s stock options in his reports, the Court **GRANTS** the motion with respect to that issue.

a. Professor Fischel Implicitly Opined that the Musk Tweets were Immaterial

Plaintiff argues that Professor Fischel should not be permitted to offer evidence or opinion regarding the materiality of the Musk Tweets because his reports “are silent as to the immateriality of any of the alleged misstatements and omissions,” and “any untimely introduction of evidence would be highly prejudicial to Plaintiff.” Mot. at 3, 5. Plaintiff observes that Professor Fischel’s reports do not contain the words “immaterial,” “material,” and “materiality” “except when paraphrasing Plaintiff’s allegations and the report of Plaintiff’s expert, Dr. Michael Hartzmark.” *Id.* at 3, 3 n.2. Plaintiff further argues that during his deposition, Professor Fischel conceded that the statements and omissions were in fact material. *Id.* at 3. And “given this unambiguous testimony,” Plaintiff contends that Professor Fischel “should not be permitted to change his testimony at trial in an effort to walk back his prior conclusions and introduce opinions and testimony to the contrary.” *Id.* at 4.

Although the words “immaterial,” “material,” and “materiality” do not appear in the report, Professor Fischel implicitly asserted that the “funding secured” statement did not impact the market and was thus immaterial. For instance, Professor Fischel observed that Tesla’s stock price increased rather than decreased following Mr. Musk’s discussion of his tweets in his blog post on August 13, 2018, which could suggest that the “funding secured” statement was not material. *See*

Fischel Rebuttal Report ¶¶ 5, 23–24. Professor Fischel also criticized Dr. Hartzmark’s purported failure to disaggregate the impact of “funding secured” from other statements in the Musk Tweets because Defendants contend that Tesla’s stock price rose because of the \$420 per share information, not the fact that funding was secured. Opp. at 2–3; *see also* Fischel Rebuttal Report ¶¶ 5, 9–14 (“Dr. Hartzmark’s analysis of alleged damages is fundamentally flawed from the outset because he makes no attempt to isolate the effect of the allegedly false information from the uncontested true statement that Mr. Musk was considering taking Tesla private at \$420 per share.”). Professor Fischel also argued that market participants “understood from the beginning that Mr. Musk’s proposal lacked details and was uncertain,” *see* Fischel Rebuttal Report ¶ 5, and that “it is reasonable to believe that the Company’s stock price still would have increased” even without the alleged misrepresentations. *Id.* ¶ 35. These portions of Professor Fischel’s reports support Defendants’ theory that the “funding secured” statement was immaterial.

As to Plaintiff’s second argument that Professor Fischel’s purportedly inconsistent deposition testimony warrants exclusion of his opinions, *see* Mot. at 3, Plaintiff has not identified any legal basis to support exclusion of evidence simply because a witness’s testimony is inconsistent with their report. A prior inconsistent statement is grounds for impeachment. *See* Fed. R. Evid. 613. Plaintiff may, of course, choose to cross-examine Professor Fischel regarding the purported inconsistency. But Plaintiff has not shown that the inconsistency is grounds for exclusion under Federal Rule of Civil Procedure 37(c)(1).

In sum: the fact that Professor Fischel’s reports do not include the specific words “immaterial,” “material,” and “materiality” does not mean that Professor Fischel does not offer opinions related to materiality in his reports. Plaintiff’s argument elevates form over substance. Professor Fischel may opine on materiality, but his testimony will be limited to the opinions in his report which set forth the bases for his contention that the Musk Tweets were immaterial.

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b. Professor Fischel did not Opine on Tesla Stock Options in His Report

In contrast to materiality, Professor Fischel did not discuss Tesla stock options in his reports.³ The closest that Professor Fischel came is when he criticized Professor Hartzmark’s use of “Bloomberg evaluated prices” for Tesla’s Notes. *See* Fischel Rebuttal Report ¶¶ 37–38. Professor Fischel opined that Professor Hartzmark should have used actual transaction prices instead of the “Bloomberg evaluated prices” to evaluate artificial inflation for Tesla’s Notes. *Id.* Because Defendants mount a similar challenge to Professor Heston’s analysis of Tesla’s stock options, *see* Section VI.B.2 *infra*, Defendants argue that Professor Fischel’s attacks on Professor Hartzmark’s analysis of damages for Tesla’s Notes applies with equal force to Professor Hartzmark’s analysis of damages to Tesla options holders. Opp. at 6. But notes are not stock options. Defendants cannot simply substitute the topic of one argument for another. Moreover, it is not clear that Professor Hartzmark’s use of “Bloomberg evaluated prices” is analogous to Professor Heston’s use of straddles. Defendants have not shown that Professor Fischel opined on stock options in his reports.

Because Professor Fischel’s critique of Professor Hartzmark’s use of artificial data for stock options was not timely disclosed, Defendants needed to show that its failure to comply with Rule 37 was “substantially justified” or “harmless.” *See* Fed. R. Civ. P. 37; *see also San Francisco Baykeeper v. W. Bay Sanitary Dist.*, 791 F. Supp. 2d 719, 733 (N.D. Cal. 2011) (holding that the plaintiff’s failure to disclose witnesses prior to filing its motion was substantially justified and harmless). Defendants did not make this showing. Therefore, the Court **GRANTS** Plaintiff’s motion as it applies to Professor Fischel’s opinions regarding Tesla stock options.

c. Conclusion

In sum, the Court **GRANTS IN PART AND DENIES IN PART** Plaintiff’s second motion in limine. Despite the lack of express wording, Professor Fischel’s reports bear on the materiality of the alleged misstatements. He may testify regarding the materiality of the tweets. But Professor Fischel may not opine regarding Tesla’s stock options: these opinions were not

³ Professor Seru—not Professor Fischel—offered opinions regarding Tesla’s stock options and Professor Heston’s methodology for calculating damages to Tesla stock option holders.

disclosed in his reports, and Defendants have not shown that this failure was substantially justified or harmless.

2. Motion in Limine No. 3 (Docket No. 481)

Plaintiff moves to preclude Defendants from arguing or introducing into evidence at trial, documents or testimony from Elon Musk that relate to subjects that contradict the Court’s summary judgment order. Mot. at 1. Plaintiff contends that because the Court has already decided as a matter of law that the Musk Tweets were false and made with the requisite scienter, “any evidence or testimony regarding the truth of the statements or Mr. Musk’s state of mind when making the tweets are irrelevant to the remaining elements of Plaintiff’s claims.” *Id.* But because, as explained below, Mr. Musk’s testimony regarding these issues is relevant to materiality and other issues remaining in the case, the Court **DENIES** this motion in limine.

a. Background

On April 1, 2022, the Court held that Plaintiff was entitled to partial summary judgment for certain issues, ruling that:

[B]ased on the evidence presented, there is no genuine dispute that the first three representations at issue were false and that Mr. Musk recklessly made those representations. To that extent, the motion is granted. In all other respects, the motion for partial summary judgment is denied.

Docket No. 387 (Summary Judgment Order) at 32–33. As the Court subsequently made clear at the June 16, 2022 hearing, however, Plaintiff must still prove at trial that Mr. Musk’s statements were *materially* false and the level of scienter. *See* Docket No. 445 at 5:6–8 (June 16, 2022 Hearing Tr.) (“To be clear, I did not find materiality with respect to the misrepresentation or a reckless disregard or knowingly scienter with regard to any such material misrepresentations.”). While the Court found that Mr. Musk “recklessly made” the three tweets at issue, *see* Summary Judgment Order at 32–33, the Court did not determine whether or not Plaintiff had shown that Mr. Musk “knowingly” made the tweets (which is subject to a higher standard).

The Court addresses Plaintiff’s evidentiary objections regarding Mr. Musk’s testimony below.

b. Mr. Musk's Testimony is Relevant

The first question is whether Mr. Musk's testimony regarding (1) the truth of the August 7, 2018 tweets or (2) his state of mind when he tweeted is relevant to any issue remaining in the case. The answer is yes. Mr. Musk's testimony is relevant because it is probative of materiality, scienter, and the apportionment of damages (should liability be established).

i. Mr. Musk's Testimony is Probative of the Materiality of the Tweets

Mr. Musk's testimony regarding the objective facts leading up to the August 7 tweets is relevant because it provides context into the statements at issue and thus goes towards whether the tweets are materially false. In his deposition, for instance, Mr. Musk described the July 31 meeting with members of the Saudi PIF in which they discussed taking Tesla private and the Saudi PIF investing in Tesla. *See* Exhibit T (Elon Musk Depo. Tr.) at 92:12-22, 99:17-100:15, 102:21-103:11. Mr. Musk testified extensively regarding his interactions with the Saudi PIF and their alleged representations to him regarding funding for the privatization transaction. *Id.* at 100:11-12, 102:11-103:15, 107:18-25.

An alleged misstatement or omission is material where there is a "substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote." *TSC Indus., Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976). "The determination requires delicate assessments of the inferences a reasonable shareholder would draw from a given set of facts and the significance of those inferences to him, and these assessments are peculiarly ones for the trier of fact." *Id.* at 450 (internal quotation marks omitted).

The law is clear that context matters for purposes of determining materiality. *See id.* at 449 (explaining that the materiality standard requires showing "a substantial likelihood that, *under all the circumstances*, the omitted fact would have assumed actual significance in the deliberations of the reasonable shareholder") (emphasis added); 17 C.F.R. § 240.10b-5(b) ("It shall be unlawful . . . [t]o make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, *in the light of the circumstances under which they were made*, not misleading.") (emphasis added); *see also* *Matrixx Initiatives, Inc. v. Siracusano*, 563 U.S. 27, 43 (2011) (assessing materiality of statement "requires consideration of the source,

content, and context of the [statement]”). To understand whether “Funding secured” is a materially false statement, then, the jury must first understand the full context, including the actual status of the funding. Mr. Musk’s testimony provides context for the tweets. *TSC Indus.*, 426 U.S. at 449.

In sum: his testimony regarding his efforts to take Tesla private, the meeting with the Saudi PIF, and other background information regarding the tweets is relevant to materiality. Facts regarding the actual status of the funding and the Saudi PIF’s representations therein may inform the jury’s determination of whether Mr. Musk’s statements regarding the funding were *materially* false. His testimony will provide key contextual facts that will aid the jury in their consideration of the statements at issue.

ii. Mr. Musk’s Testimony is Also Relevant to Scienter

For the same reasons, Mr. Musk’s testimony is also relevant to the element of scienter. To establish scienter, Mr. Littleton must prove that Mr. Musk “knew that a statement was materially false or misleading” or acted with deliberate recklessness as to its material falsity. *See GIA-GMI, LLC v. Michener*, No. 06-cv-7949-SBA, 2007 WL 2070280, at *9 (N.D. Cal. July 16, 2007) (articulating “knowingly” element as requiring knowledge of material falsity). As noted above, the Court found that Mr. Musk “recklessly made” the three tweets at issue, *see* Summary Judgment Order at 32–33, but the Court did not determine whether Mr. Musk “knowingly” made false tweets. Mr. Musk’s testimony of the events giving rise to the August 7 tweets may be probative to whether Mr. Musk acted knowingly or merely recklessly.

iii. Evidence of Mr. Musk’s Knowledge is Relevant to Apportionment

Finally, evidence of Mr. Musk’s knowledge is also relevant to the question of apportionment of damages. Under the PSLRA, defendants are jointly and severally liable “only if the trier of fact specifically determines that [the defendant] *knowingly* committed a violation of the securities laws.” *See* 15 U.S.C. § 78u-4(f)(2)(A) (emphasis added). A defendant who engages in “reckless conduct,” on the other hand, “shall be liable solely for the portion of the judgment that corresponds to the percentage of [their] responsibility . . .” 15 U.S.C. § 78u-4(f)(2)(B)(i).

Because the Court did not rule out the prospect that Mr. Musk made the statements

“knowing [they were] false” as opposed to merely with “recklessness as to [their] falsity,” Summary Judgment Order at 26, 32–33, the issue of scienter is still undecided. Indeed, both parties’ verdict forms provide that the jury will decide whether each defendant engaged in a knowing or reckless violation in this case. Opp. at 5; *see also* Docket Nos. 476, 484. Because Mr. Musk is entitled to introduce evidence demonstrating that his statements were merely reckless and not knowing, his testimony regarding the statements at issue is also relevant to the question of apportionment.

In sum: Mr. Musk’s testimony regarding the tweets at issue is relevant because it is relevant to materiality, the degree of scienter, and apportionment of damages.

c. The Risk of Juror Confusion is Minimal

Plaintiff contends that even if the evidence is relevant, it should be excluded under Rule 403 because the probative value of this evidence is substantially outweighed by the risk of confusing the jury. Mot. at 5. Plaintiff further contends that if Defendants are allowed to offer this evidence, Plaintiff will want to introduce evidence to rebut it, which will—in Plaintiff’s view—lead to a mini-trial on a collateral issue that the Court has already decided, *i.e.* the falsity of the Musk Tweets. *Id.* Plaintiff is wrong.

The risk of juror confusion is slight and does not substantially outweigh the probative value discussed above. Defendants are bound by the Court’s summary judgment order and cannot make any arguments to the jury that contradict the Court’s summary judgment order. Opp. at 3. The Court will make clear to the jury that the questions of falsity and recklessness have already been resolved.

d. Conclusion

In sum: Defendants may not argue at trial that the Musk Tweets were true. The issues of factual falsity and Mr. Musk’s recklessness were decided as a matter of law at summary judgment. Crucially, however, Mr. Musk’s testimony regarding the tweets remains probative and relevant to the questions of materiality, the level of scienter, and to the appointment of damages. The Court **DENIES** Plaintiff’s Motion in Limine No. 3.

3. Motion in Limine No. 4 (Docket No. 482)

In a slight twist on the preceding motion in limine, Plaintiff moves to preclude “Defendants from introducing any evidence or testimony at trial that would dispute the factual findings or otherwise cause a jury to question the Court’s holding” on summary judgment. Mot. at 1. The thrust of Plaintiff’s motion is again that because the Court has already found that literal falsity and scienter were proven, evidence which bears on falsity and scienter for the August 7, 2018 tweets is irrelevant. *Id.* Plaintiff casts a broad net with this motion: he cites testimony from Sam Teller and any representative of the PIF as illustrative of the type of evidence that he seeks to exclude, *id.*, but his motion is not limited to these witnesses. *See id.* at 4 (quoting deposition testimony of various members of Tesla’s Board of Directors, including Robyn Denholm, Ira Ehrenpreis, and James Murdoch).⁴ As with the previous motion in limine, the Court **DENIES** this motion because it rests on the faulty premise that this evidence is irrelevant.

Mr. Teller is Tesla’s former Director of the Office of CEO. At Mr. Teller’s deposition, he testified extensively regarding the July 31 meeting that he attended at the Tesla Fremont factory that included members of the PIF and Mr. Musk. *See* Ex. J (Teller Depo. Tr.) at 130:8–143:23. According to Mr. Teller, Yasir Al-Rumayyan told Mr. Musk during the meeting that the Saudi PIF “want[ed] to diversify from oil,” that he had “support from the most senior levels of the government,” and that Mr. Al-Rumayyan was “the decisionmaker.” *Id.* at 142:1-15. And when Mr. Musk told Mr. Al-Rumayyan that the privatization transaction would require a lot of money, “like tens of billions of dollars,” Mr. Al-Rumayyan responded with something to the effect of “Don’t worry about it. We got it.” *Id.* at 143:2-9. Mr. Teller also testified regarding Mr. Musk’s communications with Mr. Al-Rumayyan on August 10. *Id.* at 246:4–248:4; *see also* Ex. X (Teller Depo. Tr.) at 242:8-243:16.

⁴ The Court focuses on Mr. Teller and the PIF members because they feature prominently in Plaintiff’s motion. But because the members of the Board of Directors are encompassed within the motion, the Court notes that their understanding of the Musk Tweets is relevant to a potential “good faith” defense to control person liability. *See Howard v. Everex Sys., Inc.*, 228 F.3d 1057, 1065 (9th Cir. 2000) (“[A] defendant is entitled to a good faith defense if he can show no scienter and an effective lack of participation.”). As a result, testimony from the Board Defendants regarding their understanding of the Musk Tweets is relevant.

a. The Testimony of Sam Teller and Representatives of the PIF is Relevant to Materiality and Scierter

Plaintiff contends that the anticipated testimony by Mr. Teller offers no insight into the materiality of the Musk Tweets. Mot. at 3. Plaintiff further attacks Mr. Teller's testimony because (1) Mr. Teller was traveling from August 3 to August 7 and did not remember conversations that occurred during this time, and (2) Mr. Teller's testimony about events that occurred after August 7 is irrelevant because materiality is determined at the time that the statement is made. *Id.*

Mr. Teller's testimony (and that of the PIF representatives) about objective facts bearing upon the Musk Tweets is relevant for materiality and scierter. To determine whether a misrepresentation is material, the jury will be tasked with determining whether the misrepresented fact would have been significant to a reasonable investor. *TSC Indus.*, 426 U.S. at 445. To make that determination, the jury will need to hear evidence regarding the actual state of affairs so that the jury can determine whether the difference between the actual state of funding and Mr. Musk's misrepresentations regarding funding would have been significant to a reasonable investor.

Mr. Teller and various PIF representatives were personally involved in discussions regarding the prospective financing to take Tesla private. *See* Opp. at 3 (citing portions of Mr. Teller's deposition). As noted above, Mr. Teller testified about the July 31 meeting between Mr. Musk and members of the Saudi PIF at his deposition. *See* Ex. J (Teller Depo. Tr.) at 130:8-143:23. As a result, Mr. Teller (and, presumably, the PIF representatives who attended the meeting) may offer testimony about the actual state of affairs leading up to the Musk Tweets. Such testimony would be probative of materiality because it may inform the difference between Mr. Musk's representations regarding funding and the actual state of funding.

Mr. Teller's failure to recall certain events at his deposition does not mean that he is not a competent witness. Should Mr. Teller testify differently at trial, then Plaintiff may impeach him with his prior deposition testimony.

As for Plaintiff's theory that Mr. Teller's testimony about events that occurred after August 7 is irrelevant, *see* Mot. at 3, the Court disagrees. As noted above, Mr. Teller testified

about an August 10 phone call between Mr. Musk and Mr. Al-Rumayyan. *See* Ex. X at 242:8-243:16. According to Mr. Teller, the “overall takeaway” of this phone call was that Mr. Al-Rumayyan “was not, in fact, the final decisionmaker. And that was news to us. And Elon silently kind of made a gesture to me like – signaling like what’s he talking about? Like, I guess you could summarize it as like a WTF.” *Id.* at 243:10-16. Mr. Teller’s testimony about the August 10 conversation between Mr. Musk and Mr. Al-Rumayyan bears on Mr. Musk’s understanding of the state of funding on or around August 7, and is thus relevant to whether Mr. Musk acted knowingly or merely recklessly.

It is possible that Mr. Teller’s testimony may be inadmissible for other reasons, such as hearsay or being cumulative.⁵ The Court’s ruling here does not preclude Plaintiff from raising these evidentiary objections at trial.

b. Testimony from Mr. Teller, the Saudi PIF, and Other Witnesses Regarding the Tweets or Mr. Musk’s Scierter does not Violate Rule 403

The Court finds that the probative value of the testimony from Mr. Teller and the Saudi PIF representatives regarding Mr. Musk’s tweets and the facts that led to his tweets is not substantially outweighed by the risk of unfair prejudice or confusion. And as noted above, the risk of juror confusion is minimal because the Court will explain that factual falsity has already been proven.

c. Conclusion

Because testimony from other witnesses regarding the Musk Tweets and Mr. Musk’s scierter is relevant to disputed issues in the case, the Court **DENIES** Plaintiff’s Motion in Limine No. 4.

4. Motion in Limine No. 5 (Docket No. 483)

Plaintiff moves to exclude all testimony and evidence pertaining to events and information beyond the 90-day lookback period under the theory that such evidence is irrelevant or unduly

⁵ To the extent that Mr. Teller’s testimony is offered to show Mr. Musk’s state of mind, however, this testimony may be admissible. *See* Fed. R. Evid. 803(3) (establishing that a “statement of the declarant’s then-existing state of mind” is not excluded by the rule against hearsay).

prejudicial. Mot. at 1. The Court **GRANTS IN PART AND DENIES IN PART** this motion. The Court **DENIES** this motion because Plaintiff has failed to demonstrate how events within the PSLRA's 90-day lookback period are *per se* relevant or that events that occurred after the 90-day lookback period are *per se* irrelevant. But because the specific evidence that Plaintiff has identified in his motion is either inadmissible or irrelevant, the Court **GRANTS** the motion with respect to that evidence.

a. The PSLRA 90-Day Lookback Period is Used to Cap Damages

Under the PSLRA, the 90-day "lookback period" is used to limit a plaintiff's damage award; it measures the difference between the price a plaintiff paid for the stock and the mean closing price in the 90 days following the corrective disclosure. *See* 15 U.S.C. § 78u-4(e)(1). In particular, the PSLRA provides that:

Except as provided in paragraph (2), in any private action arising under this chapter in which the plaintiff seeks to establish damages by reference to the market price of a security, the award of damages to the plaintiff shall not exceed the difference between the purchase or sale price paid or received, as appropriate, by the plaintiff for the subject security and the mean trading price of that security during the 90-day period beginning on the date on which the information correcting the misstatement or omission that is the basis for the action is disseminated to the market.

15 U.S.C. § 78u-4(e)(1). The 90-day lookback period limits the ultimate damages a plaintiff can recover because a pure out-of-pocket damages measure "may substantially *overestimate* plaintiff's actual damages." *In re Mego Fin. Corp. Sec. Litig.*, 213 F.3d 454, 461 n.4 (9th Cir. 2000) (emphasis in original) (quoting Sen. Rep. 104-98, at 20 (1995)); *see also Mandalevy v. BofI Holding, Inc.*, No. 17-cv-667, 2022 WL 4474263, at *9 n.3 (S.D. Cal. Sept. 26, 2022) (stating that the 90-day lookback "prevents the possibility of class members receiving a windfall should a corrective disclosure drop the share price, but the price later rebounds despite the disclosure"). In other words, the 90-day lookback period is a timeline for capping damages; whether events within those 90-days bear on liability is not the subject of the lookback period of § 78u-4(e)(1). That provision does not supersede normal rules of relevance.

b. Post-Class Period Events are not *Per Se* Irrelevant

In some securities fraud cases, some courts have imposed a blanket ruling that all evidence

after the class period is *per se* irrelevant and thus inadmissible. *See, e.g., Wade v. WellPoint, Inc.*, 892 F. Supp. 2d 1102, 1134 n.21 (S.D. Ind. 2012) (stating that events after the class period “bear no relevance to Defendants’ knowledge at the time of the alleged misstatements and omissions”). Here Plaintiff is not asking the Court to bar evidence after the *Class Period*; rather, Plaintiff seeks to bar all evidence after the *90-day lookback period*. Mot. at 1. But as noted above, the 90-day lookback period is not a metric for determining relevancy. The Court rejects Plaintiff’s suggested imposition of such a rule as unsupported by statute.⁶

c. The Specific Evidence Cited by Plaintiff Is Irrelevant

As part of his motion, Plaintiff argued that the following specific post-Class Period evidence is inadmissible: (1) publicity stunts by Mr. Musk, such as Mr. Musk’s November 16, 2021 “Twitter poll;”⁷ (2) any “good acts” by Mr. Musk, such as donations to various charities;⁸ (3) Mr. Musk’s “lack of consumption” (*e.g.*, not owning a yacht); (4) evidence that “Tesla is driven by a sense of charitable or moral purpose;” (5) evidence of Plaintiff’s post-Class Period investments and trading; and (6) evidence related to Tesla’s economic and financial performance since 2018. Mot. at 2. The majority of this evidence is not in dispute. Defendants do not contend that the Twitter poll from November 2021 is relevant. Opp. at 3. Nor do they intend to offer evidence regarding Mr. Musk’s donations to charities, or Tesla’s current share price or subsequent trading prices in Tesla’s securities. *Id.* at 3, 6. Finally, Defendants acknowledge that character evidence such as charitable acts is generally inadmissible. *See id.* at 4 (Defendants do not intend to offer “evidence of good character with respect to Mr. Musk or any of the Director Defendants, unless of course Plaintiff attacks their character for truthfulness”).

As for Defendants’ contention that Tesla’s “mission” to ensure a sustainable future is relevant, *see id.* at 4 n.1, the Court disagrees. Defendants have not shown that Tesla’s “mission”

⁶ The Court need not address whether it is appropriate to apply, *e.g.*, the close of the Class Period on August 17, 2018, as a relevancy cutoff date as neither party seeks such a ruling.

⁷ Mr. Musk asked his followers on Twitter whether he should sell Tesla stock to pay taxes in an effort to take a stand against “tax avoidance.” Mot. at 2 (citing Ex. DD).

⁸ Specifically, Plaintiff cites the assemblage of SpaceX’s “Starlink” over Ukraine. Mot. at 2.

has any probative value for any fact of consequence in the case. *See* Fed. R. Evid. 401. In Defendants’ view, “Tesla’s mission and long-term strategic goals were intimately tied to Elon Musk’s rationale for considering a go-private transaction in the summer of 2018, as Musk and numerous other witnesses and documents confirm.” Opp. at 4 n.1. But Mr. Musk’s desire to take Tesla private is not at issue. This case deals with Mr. Musk’s knowledge of the falsity of the “funding secured” statement, not his rationale for considering the go-private transaction. As a result, Defendants have not shown that Tesla’s “mission” is relevant.

Lastly, the parties dispute the relevance of Plaintiff’s post-Class Period investments and trading in Tesla. First, Defendants assert that “[t]he fact that the lead Plaintiff—the individual who is supposedly typical and representative of the entire class—still invests in Tesla is probative of whether the alleged misrepresentations were at all material to the reasonable investor.” Opp. at 5. Second, Defendants argue that Plaintiff’s continued investment in Tesla “presents a basic credibility issue” because these investments are “inconsistent” with his allegations of fraud. *Id.* at 5–6. These arguments are meritless. Plaintiff’s decision to invest in Tesla in December 2019—eighteen months after the Musk Tweets—has no relevance as to whether he or anyone else would have found the misrepresentations material in 2018. Furthermore, there is no inconsistency between Plaintiff’s allegations that Defendants committed fraud in August 2018 and Plaintiff’s decision to invest in Tesla in December 2019. Therefore, the Court grants Plaintiff’s motion to exclude evidence of Plaintiff’s trades in Tesla stock after the Class Period.

d. Conclusion

The Court **DENIES** Plaintiff’s motion to preclude all events after the 90-day lookback period. However, the Court **GRANTS** Plaintiff’s motion to exclude the specific evidence identified in his motion: (1) publicity stunts by Mr. Musk, such as Mr. Musk’s November 16, 2021 “Twitter poll;” (2) any “good acts” by Mr. Musk, such as donations to various charities; (3) Mr. Musk’s “lack of consumption” (*e.g.*, not owning a yacht); (4) evidence that “Tesla is driven by a sense of charitable or moral purpose;” (5) evidence related to Tesla’s economic and financial performance since 2018; and (6) evidence of Mr. Littleton’s post-Class Period investments and trading.

B. Defendants' Motions in Limine1. Motion in Limine No. 4 (Docket No. 478)

Defendants move to preclude Plaintiff from offering evidence of Tesla's and Musk's settlement agreements with the Securities and Exchange Commission (SEC) as well as the underlying SEC complaints. Mot. at 1–2. As described below, the Court **GRANTS** this motion on Rule 403 grounds because the danger of unfair prejudice outweighs the probative value of the SEC settlements and complaints. The Court further finds that the SEC complaints are hearsay and that while the SEC settlement agreements may be admissible to show Mr. Musk's bias under Rule 408, their probative value is dwarfed by the substantial Rule 403 concerns.

a. Background

On August 8, 2018—the day after the Musk Tweets—it became public knowledge that the SEC had initiated an investigation related to Musk's August 7, 2018 tweets. *See Consolidated Compl.* ¶ 192. On September 27, 2018, the SEC filed a securities-fraud complaint against Mr. Musk personally; two days later, the SEC filed a related complaint against Tesla. Mot. at 2; *see also* Case No. 18-cv-8865 (S.D.N.Y. Sept. 27, 2018); Case No. 18-cv-8947 (S.D.N.Y. Sept. 29, 2018)). Tesla's stock price decreased at a statistically significant level on September 28 following the first SEC complaint. Hartzmark Report ¶ 144. On the same day that the second complaint was filed, Mr. Musk and Tesla entered into settlement agreements with the SEC. Mot. at 2 (citing Exs. A, B). Neither Musk nor Tesla admitted any liability or wrongdoing, and the settlement did not impact their “right to take legal or factual positions in litigation or other legal proceedings in which the Commission is not a party.” *Id.* After news of the SEC settlements broke, Tesla's stock price rose at a statistically significant level. Hartzmark Report ¶ 145.

Defendants acknowledge that evidence of the SEC's *investigation* may be admissible because news of the investigation became public during the Class Period and bears on Plaintiff's theory of consequential harm. *See Opp.* at 1. But Defendants distinguish between the fact of the investigation and the facts following the investigation (*i.e.*, the complaints and settlements). Specifically, Defendants argue that the SEC settlement agreements are inadmissible under Federal Rule of Evidence 408 and that the SEC complaints are inadmissible hearsay. Alternatively,

Defendants argue that both are irrelevant and unduly prejudicial under Rules 401–403. Mot. at 1.

b. Relevance and Rule 403

Plaintiff first argues that the SEC investigation, which ultimately resulted in the SEC’s complaints and settlements, is powerful evidence of the consequential harm⁹ of Defendants’ fraud. Opp. at 3 (citing Hartzmark Report ¶ 46). The SEC investigation is indisputably relevant: Professor Hartzmark, Plaintiff’s loss causation expert, opines that the SEC investigation caused by the Musk Tweets proximately led to a decline in Tesla’s stock price, resulting in damages to the Class. Hartzmark Report ¶¶ 13, 46, 78, 115; *see also* Docket No. 494 (Order Denying Motion to Exclude) at 23–28 (describing Hartzmark’s theory of consequential harm). But the problem with Plaintiff’s theory is that while it is true that the SEC *investigation*—which began during the Class Period—may be relevant to loss causation and damages, this theory does not explain how the *complaints and settlements*—which materialized more than a month after the end of the Class Period—are relevant.

Plaintiff claims that the complaints and settlements are relevant because the statistically significant stock price movements following these filings could “rebut any attempt by Defendants to attribute movements in the prices of Tesla securities during the Class Period to news and developments that are less directly related to the August 7, 2018 tweets.” Opp. at 4. Because the complaints and settlements resulted from and directly concerned the August 7, 2018 tweets, stock price movements following those events could support the argument that stock price movements during the Class Period were also because of the tweets. In other words, stock prices responded to significant news related to the subject matter of the tweets. Therefore, such evidence could be used to rebut arguments that other non-related events caused the stock price movements. Given the liberal relevancy standard of Rule 401—requiring only that evidence have “*any tendency* to make a fact more or less probable than it would be without the evidence and the fact is of consequence in determining the action”—the complaints and settlements could have some

⁹ Dr. Hartzmark defines “Consequential Harm” as harm that “is a direct and foreseeable consequence of making material misrepresentations that are subsequently revealed to be false.” Opp. at 3; *see also* Hartzmark Report ¶ 4(1) (defining consequential harm).

1 relevance to Plaintiff's damages and causation argument, even if only by inference. *See* Fed. R.
2 Evid. 401 (punctuation omitted) (emphasis added).

3 But the relevancy of this evidence is minimal at best. As noted below in the discussion of
4 hearsay, the complaints and settlements resulted in no agency findings. Thus, their probative
5 value (even if admissible) is minimal. It is also outweighed by the risk of undue prejudice because
6 a jury could be tempted to find liability based on the SEC complaints and subsequent settlements.
7 *See United States v. Bailey*, 696 F.3d 794, 801 (9th Cir. 2012) (stating that evidence of a
8 complaint may "permitted the jurors to succumb to the simplistic reasoning that if the defendant
9 was accused of the conduct, it probably or actually occurred," and "[s]uch inferences are
10 impermissible"). The risk of unfair prejudice is heightened here because, as Plaintiff himself
11 notes, Plaintiff's claims are "virtually identical to the SEC claims with regard to the August 7,
12 2018 tweets []." Opp. at 6. Courts from around the country have excluded material from federal
13 agencies where the agency has made a determination regarding one of the parties. *See Siqueiros v.*
14 *Gen. Motors LLC*, No. 16-cv-07244-EMC, 2022 WL 3974752, at *4 (N.D. Cal. Aug. 31, 2022)
15 (collecting authorities). The fact that the SEC complaints are "virtually identical" to the case at
16 hand increases the risk that the jury would impermissibly assume that Defendants are liable for the
17 accused conduct and thus magnifies the unfair prejudice.

18 Additionally, this evidence raises other Rule 403 issues, such as a risk of confusing the
19 issues and undue delay. Admission of the SEC materials could create a "mini-trial" in which
20 Defendants would have to defend against both Plaintiff's claims and the SEC's now-dismissed
21 claims. *See Grace v. Apple, Inc.*, No. 17-cv-00551-LHK, 2020 WL 227404, at *2 (N.D. Cal. Jan.
22 15, 2020) (excluding evidence of prior litigations to avoid "time-consuming tangents" and a "side
23 trial," among other Rule 403 considerations)).¹⁰ Plaintiff suggests that a mini trial would not
24 develop because "Plaintiff's claims are virtually identical to the SEC claims with regard to the
25

26 ¹⁰ Plaintiff argues that Defendants' reliance on *Grace v. Apple* is unpersuasive because in *Grace*,
27 the court excluded evidence of prior litigations which involved four district court trials and three
28 appeals. The evidence here, however, only involves "a two-month investigation and three or four
documents relating to the same occurrences covered in the Complaint." However, as discussed
there is still risk of a "mini-trial" even if not to the degree of that in *Grace*.

August 7, 2018 tweets;” thus, “[t]here are no additional factual issues unique to the SEC complaints that would require some superfluous mini-trial.” Opp. at 6. This is not necessarily true, however: Defendants allege that they would proffer evidence “as to the Commission’s history of singling out Musk and Tesla for increased scrutiny, as well as all the reasons Musk and Tesla opted to settle the SEC’s claims instead of litigating.” Mot. at 6. And regardless of whether the two claims involve the same factual issues, Defendants will want to explain their decision to settle the claims.¹¹ Defendants’ decision to settle with the SEC should not bear on any issues at trial, but there is a risk that the jury may become confused or unduly influenced.

Plaintiff argued at the pretrial conference that admission of the investigation without the subsequent proceedings would prejudice him because it would lead the jury to conclude that nothing materialized from the investigation. But any such prejudice could be remedied by a proper limiting instruction. Upon request, the Court will issue a limiting instruction informing the jury that they should not make any assumptions regarding the outcome of the SEC investigation.

In addition to Rule 403, there are also issues with hearsay and Rule 408.

c. Hearsay

The SEC complaints are hearsay for which no exception to the rule against hearsay applies. Plaintiff incorrectly contends that the complaints are admissible as factual findings from a legally authorized investigation under Rule 803(8)(A)(iii). Opp. at 5. Rule 803(8) provides that “[a] record or statement of a public office” is admissible if “it sets out . . . in a civil case . . . factual findings from a legally authorized investigation. . .” and “the opponent does not show that the source of information or other circumstances indicate a lack of trustworthiness.” Fed. R. Evid. 803(8)(A)(iii). Plaintiff has not provided any evidence to show that the SEC complaints include “factual findings” as opposed to mere “allegations.” Because the public record exception is limited to where there are factual findings, this hearsay exception does not apply to the SEC complaints. *See United States v. Klein*, No. 16-cr-44, 2017 WL 1316999, at *3–4 (E.D.N.Y. Feb.

¹¹ Defendants explained that they would want to introduce evidence that Tesla was “in the throes of . . . ‘production hell’ in connection with the Tesla Model 3, a new, mass-market vehicle that had the potential to transform Tesla into a profitable company,” which—according to Defendants—substantially influenced the decision to settle. Mot. at 2.

10, 2017) (excluding SEC complaint on hearsay grounds because complaint contained “allegations,” not “factual findings,” making Rule 803(8) inapplicable); *In re EpiPen (Epinephrine Injection, USP) Mktg., Sales Pracs. & Antitrust Litig.*, 507 F. Supp. 3d 1289, 1348 n.21 (D. Kan. 2020) (same).

The Court concludes that the public record exception does not apply and thus the SEC complaints are inadmissible hearsay. The Court turns to Rule 408, which is Defendants’ final evidentiary objection to the SEC materials.

d. Rule 408

“Federal Rule of Evidence 408 bars the admission of settlement agreements to prove liability.” *Brocklesby v. United States*, 767 F.2d 1288, 1292 (9th Cir. 1985) (citation omitted); *see also United States v. Whitney*, 180 F. App’x 670, 673 (9th Cir. 2006) (holding that evidence that the defendant settled with the SEC was properly excluded under Rule 408). But such evidence can be “offered for another purpose, such as proving bias or prejudice of a witness. . . .” Fed. R. Evid. 408(b).

Plaintiff argues that the SEC settlements are admissible under Rule 408(b) because they show Mr. Musk’s bias against short sellers and bear on Mr. Musk’s credibility.¹² In Plaintiff’s view, the Musk Tweets were “a deliberate attempt to ‘burn’ short sellers and cause them financial harm.” Opp. at 5 (citing Consolidated Compl. ¶ 162). Plaintiff asserts that the SEC settlements provide “relevant and necessary context” to some of Mr. Musk’s tweets, such as the tweet from October 4, 2018 which states: “Just want to [sic] that the Shortseller Enrichment Commission is doing incredible work. And the name change is so on point!” *Id.* at 4–5. But Plaintiff can demonstrate this supposed bias by offering the October 4, 2018 tweet without reference to the settlement agreements. Plaintiff has failed to show that the SEC settlements are necessary to show Mr. Musk’s purported bias against short sellers.

In sum: while the SEC settlement agreements may be admissible to show Mr. Musk’s bias under Rule 408, the Court finds that their probative value is dwarfed by the substantial Rule 403

¹² Plaintiff did not explain how the SEC settlements demonstrate that Mr. Musk is not credible.

1 concerns.

2 e. Conclusion

3 To the extent that Plaintiff seeks to use the SEC settlement agreements to show bias rather
4 than liability, Rule 408 does not bar their admission. But because the probative value of the SEC
5 materials is low and the risk of unfair prejudice is high, especially because the complaints are
6 hearsay, the Court **GRANTS** Defendants' motion to exclude this evidence under Rule 403.

7 2. Motion in Limine No. 5 (Docket No. 479)

8 Defendants move to exclude the opinions of Steven Heston and Michael Hartzmark's
9 opinions that rely on Professor Heston's opinions. Mot. at 1. Professor Heston created a damages
10 model to predict damages to Tesla stock option holders during the Class Period. *Id.* Professor
11 Hartzmark implemented Professor Heston's predictions to calculate damages for Tesla option
12 holders during the Class Period. *Id.* Defendants, who characterize Professor Heston's model as
13 "junk financial engineering," raise four challenges to Professor Heston's report. *Id.* Defendants'
14 core challenge focuses on Professor Heston's use of theoretical prices based on synthetic Tesla
15 instruments to calculate the "re-valued fitted option value," rather than actual market data for the
16 2,443 Tesla options traded during the Class Period. *Id.* at 1–2.

17 As set forth below, the Court finds that Professor Heston's use of the Black-Scholes-
18 Merton model to calculate the counterfactual but-for price of stock options is sufficiently reliable
19 to pass muster under *Daubert*. The process of calculating but-for prices inevitably requires some
20 degree of theoretical modeling, and the Black-Scholes-Merton model appears sufficiently
21 scientifically valid and widely accepted. But Professor Heston's use of artificial data to calculate
22 the "re-valued fitted option value" (*i.e.* the "actual" price) is another matter. There are substantial
23 questions regarding Professor Heston's use of adjusted prices rather than the actual observed
24 trading data for each individual stock option. Unlike with counterfactual prices, which must be
25 modeled, the actual prices for Tesla's stock options are observable from actual market data.
26 Professor Heston's decision to use theoretical prices derived from straddles rather than the actual
27 market price for each Tesla stock option appears to be unprecedented, and poses serious *Daubert*
28 issues. But the Court ultimately does not rule on this issue because, in light of these concerns,

during the pretrial conference Plaintiff agreed to rerun the stock option calculations using actual option price data instead of the theoretical prices. Finally, the Court finds that Professor Hartzmark sufficiently addressed potentially confounding factors to survive *Daubert*, so it **DENIES** Defendants' motion to exclude on that ground.

a. Legal Standard

Under *Daubert*, in assessing the admissibility of expert testimony under Federal Rule of Evidence 702,¹³ the Court must perform "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." *Daubert v. Merrell Dow Pharms. Inc.*, 509 U.S. 579, 592–93 (1993); *see also Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 141 (1999) (explaining that *Daubert* standards apply to all expert testimony, not only scientific experts). The Supreme Court has identified a non-exhaustive list of factors that may bear on the inquiry:

- whether the theory or technique can be or has been tested;
- whether the theory or technique has been subjected to peer review and publication;
- the known or potential rate of error with a scientific technique;
- acceptance of the technique by a relevant scientific community;

Daubert, 509 U.S. at 593–94; *see also United States v. Hankey*, 203 F.3d 1160, 1167 (9th Cir. 2000). None of these factors is dispositive and, ultimately, "[t]he inquiry envisioned by Rule 702 is . . . a flexible one" which is focused "solely on principles and methodology, not on the conclusions that they generate." *Id.* at 594–95. The district court "must act as a 'gatekeeper' to exclude junk science that does not meet Federal Rule of Evidence 702's reliability standards by making a preliminary determination that the expert's testimony is reliable." *Ellis v. Costco Wholesale Corp.*, 657 F.3d 970, 982 (9th Cir. 2011) (citation omitted). The trial court "has broad latitude not only in determining whether an expert's testimony is reliable, but also in deciding how

¹³ "A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case." Fed. R. Evid. 702.

1 to determine the testimony’s reliability.” *Id.* (citation omitted).

2 In this role, the judge is “a gatekeeper, not a fact finder,” and the “gate [should] not be
3 closed to [a] relevant opinion offered with sufficient foundation by one qualified to give it.”
4 *Primiano v. Cook*, 598 F.3d 558, 568 (9th Cir. 2010). The purpose of the gatekeeping role is to
5 ensure that expert testimony is “properly grounded, well-reasoned and not speculative,” but it is
6 not meant to substitute for “[v]igorous cross-examination, presentation of contrary evidence, and
7 careful instruction on the burden and proof [which] are the traditional and appropriate means of
8 attacking shaky but admissible evidence.” Fed. R. Evid. 702, Adv. Comm. Notes (2000)
9 (quotation omitted). Thus, “[a]fter an expert establishes admissibility to the judge’s satisfaction,
10 challenges that go to the weight of the evidence are within the province of a fact finder, not a trial
11 court judge.” *Pyramid Technologies, Inc. v. Hartford Cas. Ins. Co.*, 752 F.3d 807, 814 (9th Cir.
12 2014).

13 Because the Court acts as a gatekeeper and not a factfinder, an expert whose methodology
14 is otherwise reliable should not be excluded simply because the facts upon which his or her
15 opinions are predicated are in dispute, unless those factual assumptions are “indisputably wrong.”
16 *See Guillory v. Domtar Indus. Inc.*, 95 F.3d 1320, 1331 (5th Cir. 1996) (excluding expert opinion
17 based on a “fictitious set of facts”); *see also* Fed. R. Evid. 702, Adv. Comm. Notes (2000)
18 (explaining that “[w]hen facts are in dispute, experts sometimes reach different conclusions” and a
19 trial court is not “authorize[d] . . . to exclude an expert’s testimony on the ground that the court
20 believes one version of the facts and not the other”). Indeed, Rule 702 is “broad enough to allow
21 an expert to rely on hypothetical facts that are supported by the evidence.” Fed. R. Evid. 702,
22 Adv. Comm. Notes (2000). “It traditionally falls upon cross-examination to negate the facts or
23 factual assumptions underlying an expert’s opinion.” *In re MyFord Touch Consumer Litig.*, 291
24 F. Supp. 3d 936, 967 (N.D. Cal. 2018).

25 b. Overview of Professor Heston and His Report

26 Professor Heston is a Professor of Finance at the University of Maryland, Robert H. Smith
27 School of Business. Exhibit 368 (Heston Report) ¶ 1. He has held faculty positions as a Professor
28 or Assistant Professor of Finance since 1989, aside from five years spent working in the private

sector at Goldman Sachs, where he served as Vice President in two different divisions. *Id.* ¶¶ 1, 4. According to Plaintiff, Professor Heston is “the preeminent scholar for option pricing theory and practice in the United States.” *Opp.* at 1.

Professor Heston was asked to examine the price movements of Tesla’s stock options¹⁴ over the Class Period. Heston Report ¶ 10. In his report, Professor Heston offered five opinions based on his observations and analysis of Tesla stock option pricing following the Musk Tweets. *Id.* § 2 (Summary of Opinions). Professor Heston’s opinions are as follows: (1) at-the-money-forward Tesla option prices, including straddles, provide a reasonable and reliable measurement of option prices relative to underlying stock prices; (2) following 12:48 p.m. on August 7, 2018, Tesla stock price rose, and long-term ATM-forward Tesla option straddle prices fell sharply; (3) all long-term Tesla put options lost value on August 7, 2018; (4) prices of long-term out-of-the-money Tesla call options fell, while prices of long-term in-the-money Tesla call options rose on August 7, 2018; and (5) the combined impact of the alleged misstatements on Tesla option prices can be reliably and reasonably calculated using the Black-Scholes-Merton model. *Id.* ¶¶ 11–15. In sum, Professor Heston concluded that:

[O]n August 7, 2018, following 12:48 p.m., the price of Tesla common stock rose which generally increased the prices of Tesla call options and decreased the prices of Tesla put options. Simultaneously, long-term ATM-forward straddle prices fell significantly as a percentage of the stock price (*i.e.*, implied volatility fell). Given but-for stock prices and but-for implied volatilities, the Black-Scholes-Merton formulas can quantify the impact of but-for stock prices and implied volatilities on all Tesla options traded during the Class Period.

Id. ¶ 16.

c. Heston’s Report and Methodology

Professor Heston’s report is divided into six sections. In the first two sections, he provides information regarding his qualifications and he summarizes his opinions. *Id.* §§ 1 and 2. In the third section, Professor Heston provides background information on stock options and financial

¹⁴ A stock option confers a right (but not an obligation) to buy stock at a fixed price, called the “strike price.” Heston Report ¶ 18. There are two types of options: a call option (which is an option to buy the stock) is a bet that the stock price will rise, while a put option (which is an option to sell the stock) is a bet that the stock price will fall. *Id.* ¶¶ 18, 33, 42.

terminology. *Id.* § 3 (Background on Equity Options). Professor Heston also discusses six factors that can affect option prices, including implied volatility. *Id.* ¶ 59.

Because implied volatility is important to Professor Heston’s analyses, the Court discusses the matter. Volatility is a measure of how much prices vary in a given market. *United States v. Bogucki*, 316 F. Supp. 3d 1177, 1181 (N.D. Cal. 2018). Mathematically, it represents the average deviation from the mean price. *Id.* “A high-volatility stock varies widely in price over a given period of time, whereas a low-volatility stock varies little.” *Id.* at 1181–82. There are two accepted methods for defining volatility: implied volatility and historical volatility. *In re Zoran Corp. Derivative Litig.*, No. 06-cv-05503-WHA, 2008 WL 941897, at *6 n.3 (N.D. Cal. Apr. 7, 2008). Historical volatility uses the past fluctuations of a stock price to arrive at volatility over a given time period. *Id.* Implied volatility uses the trading prices of actual options (as opposed to the underlying stock) to arrive at a result. *Id.* “Implied volatility thus takes into account the current market view of the future volatility of the underlying stock while historical volatility uses historical fluctuations.” *Id.*; *see also* Heston Report ¶ 60 (explaining the difference between historical volatility and implied volatility).

Importantly, “[w]hen volatility is high, an option is generally more valuable, because the chance that the option will need to be exercised increases.” *Bogucki*, 316 F. Supp. 3d at 1182. Meanwhile, an option is generally less valuable when volatility is low. *Id.* “This should make sense intuitively: markets with high volatility are more uncertain, so traders have more incentive to hedge.” *Id.* As Professor Heston puts it: “put and call options protect their holders from downside risk: the most a holder can ever lose with an option is the premium.”¹⁵ Heston Report ¶ 68. “Option holders therefore benefit from implied volatility, because they stand to rake in large profits given extreme favorable price movements, but are protected against similarly extreme unfavorable price changes.” *Id.*

Another important financial concept that Professor Heston explains in the background section is an option straddle. A “long straddle” is formed when an investor buys both a call and

¹⁵ The premium is the amount paid to purchase a stock option. Heston Report ¶ 25.

put option of the same underlying asset with the same strike price and expiry date. *Id.* ¶ 73. The rationale behind a long straddle is that the investor believes that the stock price will change substantially but is not sure whether the price will rise or fall. *Id.* A “short straddle” occurs when an investor sells a call and put option of the same underlying asset with the same strike price and expiry date. *Id.* ¶ 74.¹⁶ A short straddle writer is betting that the stock price will remain stable (*i.e.*, that there will be less implied volatility). *Id.* When holders buy a straddle, they benefit from a large change in the stock price, regardless of the direction. *Id.* ¶ 75. If the stock price goes up, for instance, the investor will exercise the call option and allow the put option to expire; conversely, if the stock price decreases, the investor will exercise the put option and allow the call option to expire. *Id.*

In the fourth section of Professor Heston’s report, he explains options theory and the Black-Scholes-Merton (“BSM”) model. *See* Heston Report § 4. The BSM model is a theoretical mathematical valuation of an option contract consisting of various equations. *Id.* ¶¶ 101, 105. The BSM model considers several variables, including stock price, strike price, implied volatility, and time to expiration, in order to determine the value of a stock option. *Id.* ¶ 101; *see also id.* ¶¶ 105–06 (listing the variables used in the BSM formula and explaining how the variables interact with each other). Aside from implied volatility, the other variables in the BSM formula are directly observable; as a result, the BSM model can be used to derive implied volatility. *See* Heston Report ¶¶ 59–60, 82; *see also* Exhibit HH (Heston Depo. Tr.) at 104:6-24 (explaining that he calculated implied volatility by “inverting” price “to find what volatility would match that price”). According to Professor Heston, the BSM model is the accepted industry and academic standard for option pricing. *Id.* § 4.4; *see also id.* ¶ 113 (“[The] Black-Scholes option pricing model is the most widely used formula, with embedded probabilities, in human history.”) (citation omitted). Many variations on the BSM model have emerged in the decades following its original publication which relax or generalize particular assumptions. *Id.* ¶ 113. The original BSM

¹⁶ As explained in the Heston Report, there is no temporal element to a “short” versus “long” straddle; the difference between these types of straddles hinges on whether the puts and calls are being purchased or sold. Heston Report ¶¶ 73–74.

1 formula assumes that implied volatility is constant across stock and strike prices. *Id.* ¶ 61.

2 In the fifth section of Professor Heston’s report, he described his analyses of Tesla’s stock
3 options during the Class Period. *See* Heston Report § 5 (“Equity Options on Tesla Common Stock
4 During the Class Period”). Professor Heston found that there were 2,443 Tesla option series
5 traded during the Class Period, which were roughly evenly divided between call options and pull
6 options. *Id.* ¶ 114. The strike prices of these option series ranged from \$10 to \$700, and the
7 maturities ranged from August 10, 2018 to January 17, 2020. *Id.* In total, seventeen maturity
8 dates were traded. *Id.* ¶ 114 n.71.

9 Professor Heston further found that Tesla common stock price movements affected the
10 value of Tesla options. *Id.* ¶¶ 118–23. He observed that the price of long-term¹⁷ at-the-money
11 (“ATM”)-forward¹⁸ straddles dropped sharply after 12:48 p.m. on August 7, 2018. *Id.* ¶¶ 130–31,
12 133. Heston opined that all of the long-term Tesla stock options lost value because of a drop in
13 implied volatility. *Id.* ¶¶ 154, 161. The short-term stock options, on the other hand, slightly
14 gained in value. *Id.* ¶ 133. As Professor Heston put it, “the longer term an option was, the more
15 its price fell on the afternoon of August 7, 2018.” *Id.* ¶ 146. According to Professor Heston, the
16 straddle price movements that Professor Heston observed on August 7 deviated in statistically
17 significant ways from Tesla’s straddle price movements in the six months preceding August 7. *Id.*
18 ¶ 137. Professor Heston opined that these option price movements were consistent with the
19 academic literature on option prices following a merger and buyout announcement: typically,
20 implied volatility decreases when the deal is perceived as “close to being successful.” *Id.* ¶¶ 134–
21 35 (internal citation omitted).

22
23 ¹⁷ Professor Heston defined long-term Tesla options as those expiring on or after October 19,
24 2018. *Id.* ¶ 131. Of the seventeen different maturity dates traded during the Class Period, nine of
them were on or after October 19, 2018. *See id.* ¶ 131 n.81.

25 ¹⁸ Options can be “in-the-money” (“ITM”), “at-the-money” (“ATM”), or “out-of-the-money”
26 (“OTM”). *Id.* ¶ 21. Generally, an investor will only exercise an option if it is in-the-money—
27 *i.e.* it would be profitable to exercise the option. *Id.* ¶¶ 21, 33, 42. An option is at-the-money
28 when the current price of the stock (the “spot price”) equals the strike price. *Id.* ¶ 21. An ATM-
forward straddle, as opposed to a simple ATM straddle, means that the forward (rather than the
spot) price equals the strike for both option positions in the straddle. *Id.* ¶¶ 80 & 80 n.32
(explaining that the forward price “is roughly equal to the spot price, but includes storage costs
and interest rates).

In the sixth section of Professor Heston’s report, he applies the BSM model and other economic principles to calculate Tesla’s “counterfactual” prices for Tesla’s stock options. *See* Heston Report § 6 (“The BSM Model Can Calculate Counterfactual Option Prices.”). Professor Heston uses an “impact quantum”¹⁹ to calculate the difference between option prices based on actual option transactions and the calculated price for an option using counterfactual stock price and implied volatility. *Id.* ¶ 164. Professor Heston’s methodology is designed to capture the *change* in option prices as opposed to the *level* of prices. *Id.* (“We apply the BSM model with a robust methodology that measures *changes* in value, thereby differencing out potential biases in levels.”) (emphasis in original); Ex. C (Heston Depo. Tr.) at 249:11-17; *cf.* Heston Rebuttal Report ¶ 22.

Professor Heston’s five-step methodology for calculating the counterfactual prices for Tesla’s stock options is as follows. First, he creates a synthetic Tesla instrument—an ATM-forward straddle—based on the actual prices of Tesla put and call options just below and just above the money to calculate the price of a straddle that is exactly at-the-money.²⁰ Heston Report ¶ 165(a); Ex. C (Heston Depo. Tr.) at 72:25–73:6. Second, based on the price of the ATM-forward straddle, Professor Heston applies the BSM model to derive the implied volatility. Heston Report ¶ 165(a); Ex. HH (Heston Depo. Tr.) at 93:10–14 (“I’m observing the actual quoted price of a portfolio of options, which is exactly at-the-money forward, and then I’m inverting that actual price to find what volatility would match that price.”). Professor Heston refers to this calculated implied volatility as the “Actual Implied Volatility.” Heston Report ¶ 165(a). Third, Professor Heston calculates the price for the ATM-forward straddle, and a corresponding implied

¹⁹ An impact quantum measures the magnitude of a shift. Heston Report ¶¶ 163, 181 (explaining that an impact quantum shows a dollar or percentage amount by which an option would have been more or less expensive). As Professor Heston says in his rebuttal report, “the measurement of impact quantum is the difference between option values under one set of assumptions, and option values under an alternative but-for scenario. It is essentially the change in option values under two different scenarios.” Heston Rebuttal Report ¶ 29.

²⁰ Professor Heston created an ATM-forward straddle “because ATM-forward straddle prices represent the total price of a portfolio of ATM-forward options for a particular maturity.” *Id.* ¶ 81. Professor Heston further explained that, according to the BSM model, “implied volatility of an option can be derived given the price of an ATM-forward straddle, the current stock price, and the time to expiration.” *Id.* ¶ 82.

1 volatility, for the seventeen Tesla option maturities traded during the Class Period. Fourth, for
 2 each of the seventeen ATM-forward straddles, Professor Heston uses Tesla's stock price on each
 3 day of the Class Period and the calculated implied volatility, to derive a "Re-Valued Fitted Option
 4 Value." *Id.* ¶ 165(b). Finally, Professor Heston opines that a "but-for" option price can be
 5 calculated for each Tesla option traded during the Class Period by plugging into his formula a
 6 "counterfactual implied volatility and stock price," which is based on Tesla's implied volatility
 7 and stock price at 12:47 p.m. on August 7, 2018 (*i.e.* the minute before Mr. Musk published his
 8 first tweet), and identifying the difference between the Re-Valued Fitted Option Value and But-for
 9 Fitted Option Value. *Id.* ¶¶ 166, 183; *see also* Table 5 (providing an "illustrative impact
 10 example").

11 d. Professor Heston's Use of the BSM Model for But-For Prices is Sound

12 Professor Heston was tasked with analyzing the price movements of options on Tesla stock
 13 during the Class Period and attempting to create, through the use of statistical modeling,
 14 counterfactual (but-for) option prices in a world where the Musk Tweets did not exist. In this
 15 hypothetical but-for world, Tesla's stock options would still have been bought and sold, and
 16 option prices still would have risen and fallen. Of course, the precise prices and levels of implied
 17 volatility are unknowable: this counterfactual world is marked by educated guesses and well-
 18 informed assumptions. As a result, some form of modeling must be used to derive counterfactual
 19 prices. The question for the Court is whether Professor Heston's model to predict these
 20 counterfactual but-for prices is sufficiently reliable to satisfy *Daubert*.

21 The Court finds that Professor Heston's use of the BSM model to derive implied volatility
 22 and calculate counterfactual prices is sufficiently reliable for *Daubert*. Putting aside Professor
 23 Heston's use of artificial data, which is discussed below, his methodology is otherwise sufficiently
 24 sound: it draws from peer-reviewed and published work and is subject to peer testing, and the
 25 BSM model enjoys widespread acceptance in the scientific community. Academic research
 26 supports the general idea of modelling option values by fitting an implied volatility curve.
 27 Hartzmark Rebuttal Report ¶ 27 (citing John Hull, *Option, Futures and Other Derivatives* (2015)).
 28 The BSM model is a "widely accepted option pricing model," *In re Countrywide Fin. Corp. Sec.*

1 *Litig.*, 273 F.R.D. 586, 618 (C.D. Cal. 2009), for which Robert Merton and Myron Scholes
 2 received the Nobel Memorial Prize in Economics. Heston Report ¶ 111. The Black-Scholes paper
 3 from 1973 has over 40,000 citations on Google Scholar. Heston Rebuttal Report ¶ 12. And
 4 Defendants themselves do not dispute that the BSM model can be used to predict option prices in
 5 certain circumstances; as explained below, the issues raised in their motion primarily flow from
 6 Professor Heston’s use of “theoretical prices” for “synthetic Tesla instruments” that did not
 7 actually trade. Opp. at 1, 2 n.1.

8 To the extent that Defendants take issue with Professor Heston’s assumption that implied
 9 volatility will remain constant across a portfolio of options with the same date of expiry for but-for
 10 prices, the Court finds that this assumption is sufficiently supported for *Daubert*. The use of one
 11 implied volatility for all options with the same maturity is an assumption that is derived from the
 12 BSM model itself. See Heston Report ¶ 61; see also Heston Rebuttal Report ¶ 25 (“By definition,
 13 the BSM formula assumes constant implied volatility.”). As noted by Plaintiff, “the application of
 14 one implied volatility to value multiple option series for the same maturity is widely accepted in
 15 the finance industry and, indeed, Tesla itself does this when valuing options for its financial
 16 statements.” Opp. at 2, 4; see also Ex. II (Excerpts from Tesla Inc.’s 10-K, dated December 31,
 17 2021) at 60, 82–83 (showing that Tesla uses the Black-Scholes option-pricing model to derive the
 18 fair value of stock option awards); Ex. JJ (Seru Depo. Tr.) at 28:3-6 (testifying that he was aware
 19 that Tesla uses the Black-Scholes formula to value its options for accounting purposes and that use
 20 of the Black-Scholes model to evaluate stock options was “a pretty standard practice”).

21 In the same vein, to the extent that Defendants argue that Professor Heston’s methodology
 22 is unreliable because his calculations (based on an assumed constant implied volatility) yielded
 23 different figures than Professor Seru’s calculations (based on a variable implied volatility), this
 24 does not warrant exclusion under *Daubert*. As to Defendants’ disagreement with Professor
 25 Heston’s choice—based on the BSM model—to assume a constant rate of implied volatility,
 26 Professor Heston’s decision is supported by academic research; there is evidence that models
 27 using constant implied volatility perform better than models with variable implied volatility for
 28 measuring impact quantum for options prices. Heston Rebuttal Report ¶¶ 23, 25, 27, 30.

1 Defendants are, of course, free to argue to the jury that a different model with different
2 assumptions is better suited to calculating option price changes. But these differences do not
3 make Professor Heston's methodology fatally unreliable under *Daubert*.

4 In sum, the Court is satisfied that Professor Heston's use of the BSM model to derive
5 implied volatility and calculate the but-for curve satisfies *Daubert*.

6 The Court next addresses Professor Heston's use of theoretical data instead of actual
7 market data for each stock option at issue to calculate the "actual option curve," or, as Professor
8 Heston refers to it, the "re-valued fitted option value." Heston Report ¶ 183.

9 e. Professor Heston's Use of Theoretical Data Raises Serious Questions

10 Defendants argue that Professor Heston's model for calculating damages to Tesla's option
11 holders is unreliable because it does not compare actual Tesla option prices or quotes with "but
12 for" prices. Mot. at 1. Instead, Professor Heston calculates prices for 17 synthetic Tesla
13 instruments via ATM-forward straddles and then applies these prices to the 2,443 Tesla options
14 that traded during the Class Period, even though—according to Defendants—these stock options
15 had "markedly different strike prices, maturities, and moneyness." *Id.* at 3. Professor Heston and
16 Professor Hartzmark use the difference between these calculated predicted "actual" prices with the
17 calculated but-for prices to measure damages. Defendants assert that the flaws in Professor
18 Heston's use of model-generated price predictions are evidenced by the fact that, at least a
19 hundred times, his model assigns damages to some class members which exceed their investment.
20 *Id.* at 3–4. Defendants conclude that Professor Heston's use theoretical prices rather than actual
21 market data is "junk financial engineering with no semblance to reality." Mot. at 2.

22 Defendants have raised serious questions about Professor Heston's use of theoretical data
23 to calculate the "re-valued" curve. As noted above, the "but-for" curve requires predictive
24 modeling to derive counterfactual prices. But it is not clear why calculated theoretical re-valued
25 prices are needed to determine damages when actual option prices and implied volatility exist, are
26 available, and can be used to generate the actual curve. During the hearing, in response to the
27 Court's questioning, Plaintiff could not point to any precedent in caselaw or practice where
28 adjusted data based on ATM-forward straddles was used instead of actual known market data for

each specific stock option. Plaintiff also conceded that he could use actual option prices to compare with the hypothetical but-for price to calculate damages. Finally, the instances where the purported damages for certain investors exceeded their investments indicate a potential problem with the integrity of the model for which Plaintiff had no good answer. During the hearing, in response to the concerns expressed by the Court, Plaintiff agreed to use actual, not adjusted, data to calculate the “actual” (not but-for) curve. As a result, the Court need not decide whether Professor Heston’s use of theoretical data to calculate the “re-valued fitted option value” fails *Daubert*; that issue is now moot.

The Court now turns to a purported failure to account for potential confounding factors, which is the final issue raised by Defendants in their motion.²¹

f. Implications for Hartzmark’s Report

Finally, Defendants object that neither Professor Heston nor Professor Hartzmark showed that the changes in implied volatility were not caused by confounding variables (such as market-wide or industry-specific forces). *Id.* at 1, 6–7. As discussed below, Professor Hartzmark conducted an event study in which he accounted for market and industry factors and potential firm-specific confounding news that could have impacted Tesla’s *common stock price*. Hartzmark Report ¶¶ 49, 146–50. The question for the Court is whether Professor Hartzmark sufficiently addressed potentially confounding factors for *implied volatility*.

Both Professor Heston and Professor Hartzmark found that there were “large and unusual movements” in options prices and related implied volatility following the Musk Tweets, which Professor Hartzmark opined were caused by the Musk Tweets and “reflected an increased probability of a going private transaction being completed.” Hartzmark Report ¶¶ 185–86; *see also id.* ¶ 206 (noting that “the predominant cause” of Tesla’s stock price declines and anomalous changes in implied volatility over the Class Period was the continual incorporation of news (or lack thereof) correcting the alleged misrepresentations and omissions of the Musk Tweets and the

²¹ The other issues raised by Defendants in their motion with respect to Professor Heston’s methodology—such as the purportedly “nonsensical” results and their disagreement with Professor Heston’s charts from his rebuttal report—have been mooted by Plaintiff’s decision to rerun his calculations using actual market data for each particular stock option.

1 revelations about the Consequential Harm). In reaching this conclusion, Professor Hartzmark first
 2 adjusted for overall market-wide and industry-wide influences which lowered Tesla’s stock
 3 price.²² Hartzmark Report ¶¶ 147–48 (calculating the adjusted price of Tesla common stock from
 4 August 7 to 17); *see also* Table 5 (listing adjusted prices for Tesla common stock). Professor
 5 Hartzmark also conducted an event study and reviewed hundreds of news articles and analyst
 6 reports to determine whether Tesla’s stock price might have been impacted by disclosure of
 7 company-specific information unrelated to the alleged misstatements. *Id.* ¶¶ 149–150. Professor
 8 Hartzmark did not find any materially negative new confounding information that would have
 9 caused Tesla’s stock price to fall. *Id.* ¶¶ 150–69; *see also* Table 6 (listing disclosures with
 10 potentially confounding news).

11 It stands to reason that Professor Hartzmark’s event study which found no new, company-
 12 specific confounding information decreased Tesla’s stock price carries some weight with respect
 13 to implied volatility. While the Court recognizes that implied volatility is different from stock
 14 price, they are related, and neither party described any evidence nor articulated any reason to
 15 believe that the observed movements in implied volatility were due to something other than the
 16 Musk Tweets. And in fact, both Professor Heston and Professor Hartzmark cited academic
 17 research demonstrating that implied volatility typically falls for options with successively longer
 18 expiration dates following announcement of a merger or buyout. Heston Report ¶ 134; Hartzmark
 19 Report ¶¶ 187–88, 194. Professor Heston found that this “*exact* pattern [was] visible in the Tesla
 20 options data”: after 12:48 p.m. on August 7, “the longest maturing options lost the most value and
 21 recovered the slowest, while the very short-term options saw little effect.” Heston Report ¶ 135
 22 (emphasis in original); *see also* Hartzmark Report ¶ 189 (describing how other analysts noted a
 23 relationship between changes in volatility of Tesla’s long-dated options and the Musk Tweets).
 24 According to Professor Heston, this pattern deviated significantly from the previously observed

25
 26 ²² During the hearing, Plaintiff explained that Professor Hartzmark uses these adjusted prices when
 27 determining the but-for price for Tesla’s stock options to account for market-wide influences. *See*
 28 Docket No. 507 (October 25, 2022 PTC Tr.) at 58:5-9 (“So when it comes to determining the but-
 for price for stock options, Dr. Hartzmark doesn’t propose to use the \$305.50, which is the
 observed market price of the stock. He uses the \$312.90, which is his adjusted price to adjusted
 market factors, an adjustment, by the way, which defendants accept.”).

relationship between short- and long-term straddles in the six months leading up to August 7 and the six months following August 7; the pattern remained in flux during the Class Period. Heston Report ¶¶ 136, 138; *see also* Figure 16 (showing statistically significant deviations in short- and long-term straddles on multiple days in the Class Period). Professor Heston found that “[i]t was not until August 17, 2018, that the relationship between short- and long-term straddles returned to the normal levels observed historically.” Heston Report ¶ 139; *see also* Hartzmark Report ¶ 190 (“Professor Heston demonstrates that for longer-term options the volatility over the Class Period immediately declines and then rises by August 17, 2018.”).

In light of the event study for stock price and the evidence put forth linking changes in implied volatility to privatization transactions analogized here, and in the absence of any evidence suggesting that unrelated facts contributed to the changes in implied volatility, the Court finds that Professor Hartzmark sufficiently addressed potentially confounding factors to survive *Daubert*. *See S.E.C. v. Leslie*, No. 07-cv-3444, 2010 WL 2991038, at *15 (N.D. Cal. July 29, 2010) (“While [defendant] certainly may argue to the jury that [the expert] did not reliably filter out other confounding variables that would have affected the stock price[,] . . . he has not shown that [the] opinion is so unreliable that it must be excluded.”); *Smilovits v. First Solar, Inc.*, No. 12-cv-0555, 2019 WL 7282026, at *9 (D. Ariz. Dec. 27, 2019) (“Defendants’ criticisms that Feinstein discounted the confounding information and exaggerated the impact of the alleged fraud go to his credibility and the weight of his opinions, not their admissibility.”). Defendants’ motion to exclude Professor Hartzmark’s report on the basis of a purported failure to disaggregate confounding information for stock options is **DENIED**.

g. Conclusion

Professor Heston’s use of the BSM model to derive the but-for curve is sufficiently justifiable to pass *Daubert* scrutiny. Defendants raised substantial questions regarding Professor Heston’s use of theoretical data to calculate the “actual” curve, but because Plaintiff agreed to rerun his calculations to use actual, not adjusted market data, for each individual stock option, the Court ultimately does not rule on whether that aspect of Professor Heston’s methodology fails *Daubert*. The Court **DENIES** Defendants’ motion to exclude Professor Hartzmark on the basis of

an alleged failure to address confounding information.

VII. CONCLUSION

In summary, the Court rules on the parties' motions in limine as follows:

- Plaintiff's Motion in Limine No. 2 to Exclude Testimony, Opinion, and Evidence by Defendants' Experts not Contained in their Written Reports (Docket No. 480): **GRANTED IN PART AND DENIED IN PART.** Despite the lack of express wording, Professor Fischel's reports bear on materiality, so he may testify regarding the materiality of the Musk Tweets. But Professor Fischel may not opine regarding Tesla's stock options because these opinions were not disclosed in his reports, and Defendants have not shown that this failure was substantially justified or harmless.
- Plaintiff's Motion in Limine No. 3 to Preclude Evidence or Testimony from Elon Musk that Contradicts the Court's Summary Judgment Order (Docket No. 481): **DENIED.** Defendants may not argue at trial that the Musk Tweets were true. The issues of factual falsity and Mr. Musk's recklessness were decided as a matter of law at summary judgment. But Mr. Musk's testimony regarding the Musk Tweets remains probative and relevant to the questions of materiality, the level of scienter, and to the appointment of damages.
- Plaintiff's Motion in Limine No. 4 to Exclude Irrelevant and Duplicative Evidence re: Falsity or Scienter (Docket No. 482): **DENIED.** As with the previous motion in limine, this motion rests on the faulty premise that this evidence is irrelevant.
- Plaintiff's Motion in Limine No. 5 to Preclude Evidence re: Post-Class Period Events (Docket No. 483): **GRANTED IN PART AND DENIED IN PART.** Plaintiff has failed to demonstrate how events within the PSLRA's 90-day lookback period are *per se* relevant or that events that occurred after the 90-day lookback period are *per se* irrelevant. But because the specific evidence that Plaintiff has identified in his motion is either inadmissible or irrelevant, the Court **GRANTS** the motion with respect to that evidence.

- Defendants’ Motion in Limine No. 4 to Exclude Evidence Regarding the SEC Complaints and Settlements (Docket No. 478): **GRANTED**. The danger of unfair prejudice outweighs the probative value of these materials.
- Defendants’ Motion in Limine No. 5 to Exclude the Opinions of Steven Heston and Michael Hartzmark’s Opinions that Rely on Them (Docket No. 479): **DENIED**. Professor Heston’s use of the BSM model to calculate the counterfactual but-for price of stock options is sufficiently reliable for *Daubert*. And while Defendants raised serious questions about Professor Heston’s use of artificial data to calculate the “actual” price, the Court **DENIES** this portion of the motion as moot in light of Plaintiff’s decision to rerun his analyses using actual option price data instead of the theoretical prices derived from straddles. Defendants’ motion to exclude Professor Hartzmark’s report on the basis of a purported failure to disaggregate confounding information for stock options is **DENIED**.

IT IS SO ORDERED.

Dated: December 7, 2022



EDWARD M. CHEN
United States District Judge